NAD

SERVICE MANUAL

L76

A/V RECEIVER

L76
A/V RECEIVER

SECTION 1
SUMMARY

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PRODUCT SAFETY SERVICING GUIDELINES

CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY. NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

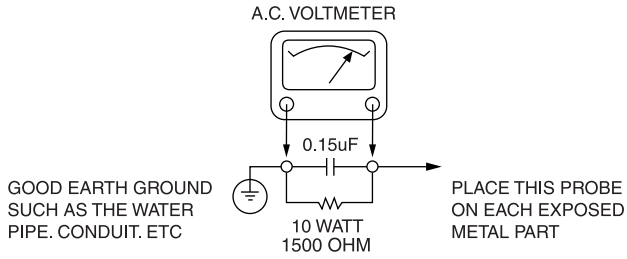
WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM AC LINE SHOCK.

SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED. A CHECK SHOULD BE MADE OF THE FOLLOWING.

SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING AC CORD). AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECEIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUDING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES, DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN AC LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFET TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN AC VOLTMETER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD, 150V AC TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME.
   MEASURE THE AC VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR.
   REVERSE THE AC PLUG AND REPEAT AC VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART.
   VOLTAGE MEASURE MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP AC ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.



SUBJECT : GRAPHIC SYMBOLS

THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.

THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PLACEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCAL MOUNTING KIT MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the A/V Receiver covered by this service data and its supplements and addends, read and follow the *SAFETY PRECAUTIONS. NOTE* : if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publication, always follow the safety precautions.
Remember Safety First:

General Servicing Precautions

1. Always unplug the A/V Receiver AC power cord from the AC power source before:
   (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
   (2) Disconnecting or reconnecting any internal electrical plug or other electrical connection.
   (3) Connecting a test substitute in parallel with an electrolytic capacitor.
   Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Do not spray chemicals on or near this A/V Receiver or any of its assemblies.

3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cottontipped swab, or comparable soft applicator.
   Unless specified otherwise in this service data, lubrication of contacts is not required.

4. Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.

5. Do not apply AC power to this A/V Receiver and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.

6. Always connect test instrument ground lead to the appropriate ground before connecting the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter(500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.
Note 1 : Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical Es devices are integrated circuits and some field effect transistors and semiconductor chip components.
The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.

3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.

4. Use only an antistatic solder removal device. Some solder removal devices not classified a “anti-static” can generate electrical charges sufficient to damage ES devices.

5. Do not use freonpropelled chemicals. These can generate electrical charge sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handing unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

SPECIFICATIONS

Amplifier Section

Output Power (Front) :
F.T.C Rating:
60 watts RMS per channel minimum, both channels driven into 8 ohms from 20 Hz to 20kHz with no more than 0.09% total harmonic distortion

Surround Output Power (0.5% THD, 1 kHz, 8 ohms) :
40 + 40 Watt (Front)
40 Watt (Center)
40 + 40 Watt (Rear)

Total Harmonic Distortion (Front) :
0.02 % (at 60 watts, 1 kHz)

Delay Time :
DOLBY DIGITAL : REAR : 0 - 15 ms
CENTER : 0 - 5 ms
DOLBY PRO LOGIC : MOVIE : 10 - 25 ms
MUSIC : 0 - 15 ms
EMULATION : 10 - 25 ms

Audio Input Sensitivity/Impedance :
*LINE : 200 mV/47 k ohms

Output Level / Impedance :
TAPE REC : 185 mV/2.2 k ohms

Frequency Response :
*LINE : 20 Hz - 65 kHz, +1/ -3 dB

Signal-to-Noise Ratio : 1 Watt
*LINE : 70 dB (IHF-A)

Tone Control :
BASS : ±10 dB at 100 Hz
TREBLE : ±10 dB at 10 kHz

Digital Audio Section

Sampling Frequency :
32 kHz, 44.1 kHz, 48 kHz

DIGITAL Input Level/Impedance
COAXIAL : 0.5 Vp-p/75 ohms
OPTICAL : -15 dBm ~ -21 dBm

Video Section

Input Sensitivity /Impedance : 1.0 Vp-p/75 ohms
Output Level /Impedance : 1.0 Vp-p/75 ohms

*LINE means TAPE, AUX, VIDEO 1, VIDEO 2, DVD

- Improvements may result in specifications and features changing without notice.
- Illustrations may differ slightly from production models.

FM Tuner Section

(Without notes 100.1 MHz, 65 dBf)

Tuning Range :
87.5 MHz - 108.0 MHz : 50 kHz steps

AM Suppression Ratio: 45 dB

Total Harmonic Distortion (1 kHz) :
Mono : 0.4%
Stereo : 0.5%

Frequency Respones : 30 Hz - 15 kHz, +1/ -1. 5 dB
Stereo Separation (1 kHz) : 40 dB

Signal-to-Noise Ratio :
Mono : 75 dB
Stereo : 70 dB

AM Tuner Section

Tuning Range: 522 kHz - 1,620 kHz (9 kHz steps)

Usable Sensitivity : 55 dB/m
Total Harmonic Distortion : 0.8% at 85 dB/m
Signal-to-Noise Ratio : 45 dB at 85 dB/m

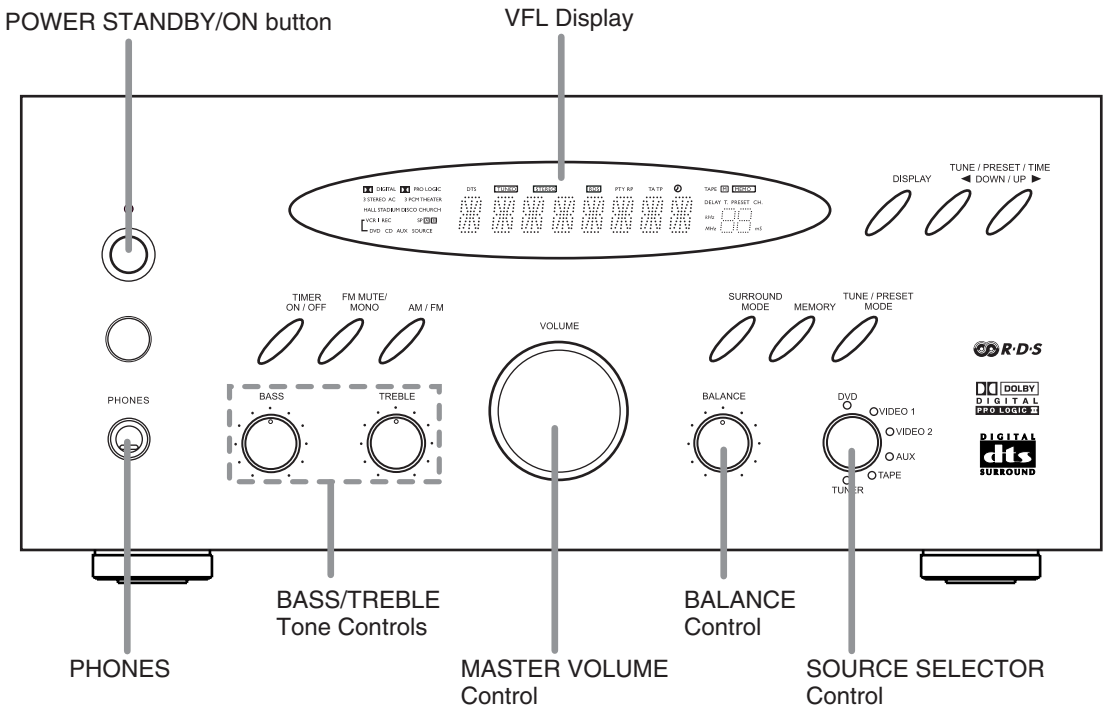
General

Power Requirements : 230V AC, 50Hz
Power Consumption : 1.2A

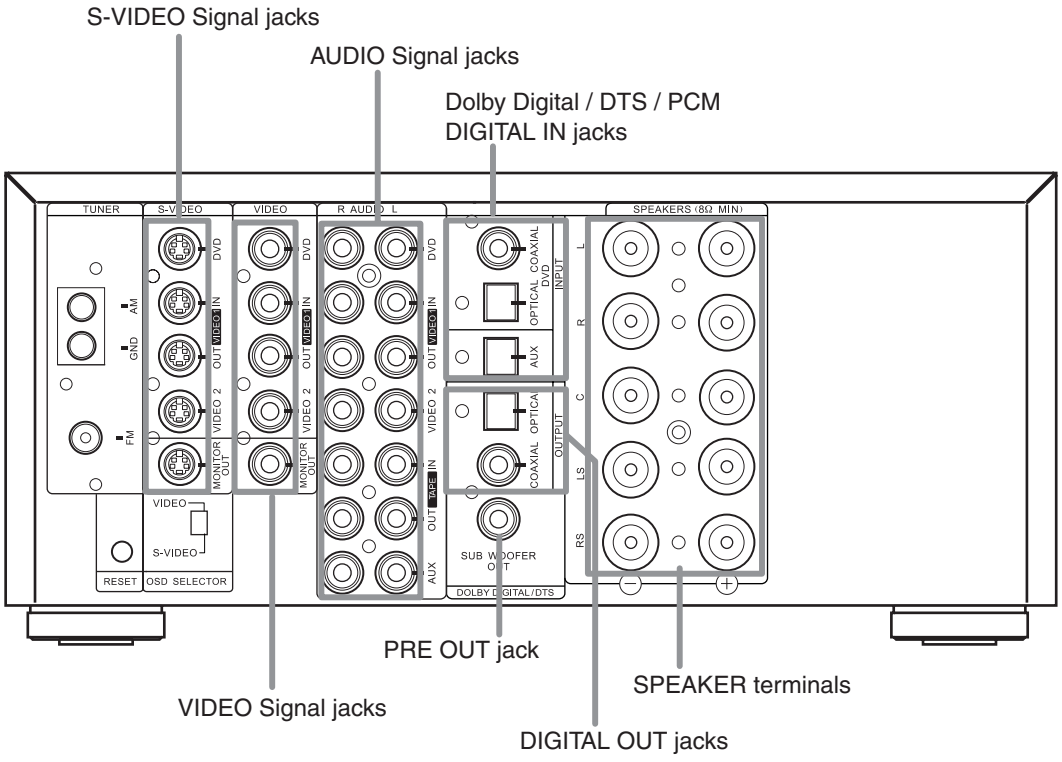
Dimensions (W x H x D) : 285 x 133 x 348
Weight (net) : 8.8kg

LOCATION OF CUSTOMER CONTROLS

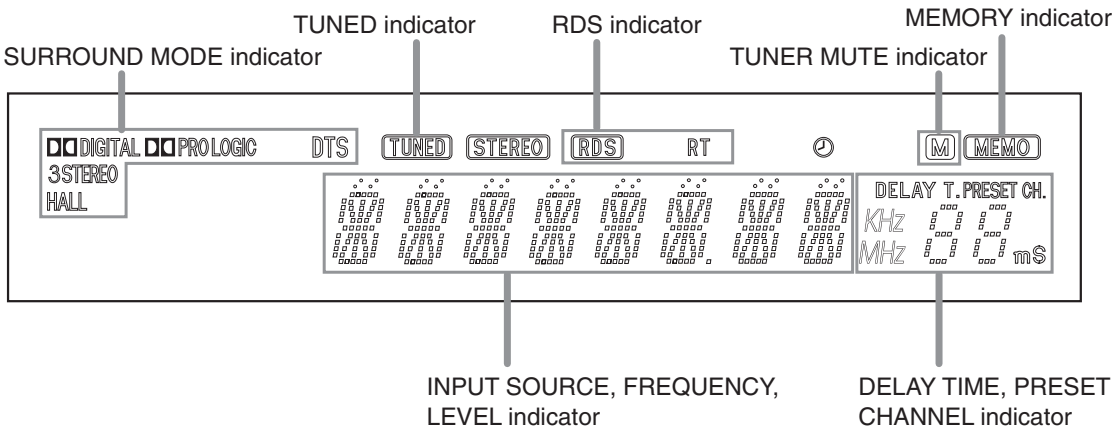
FRONT PANEL



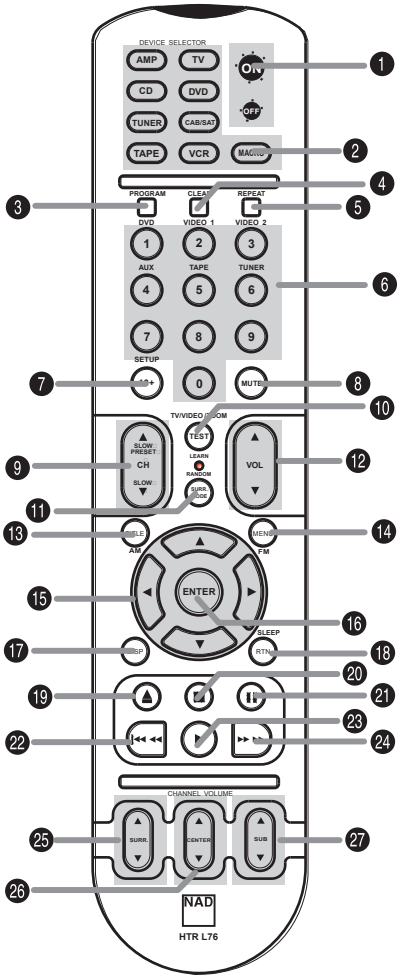
REAR PANEL



VFL DISPLAY



REMOTE CONTROL

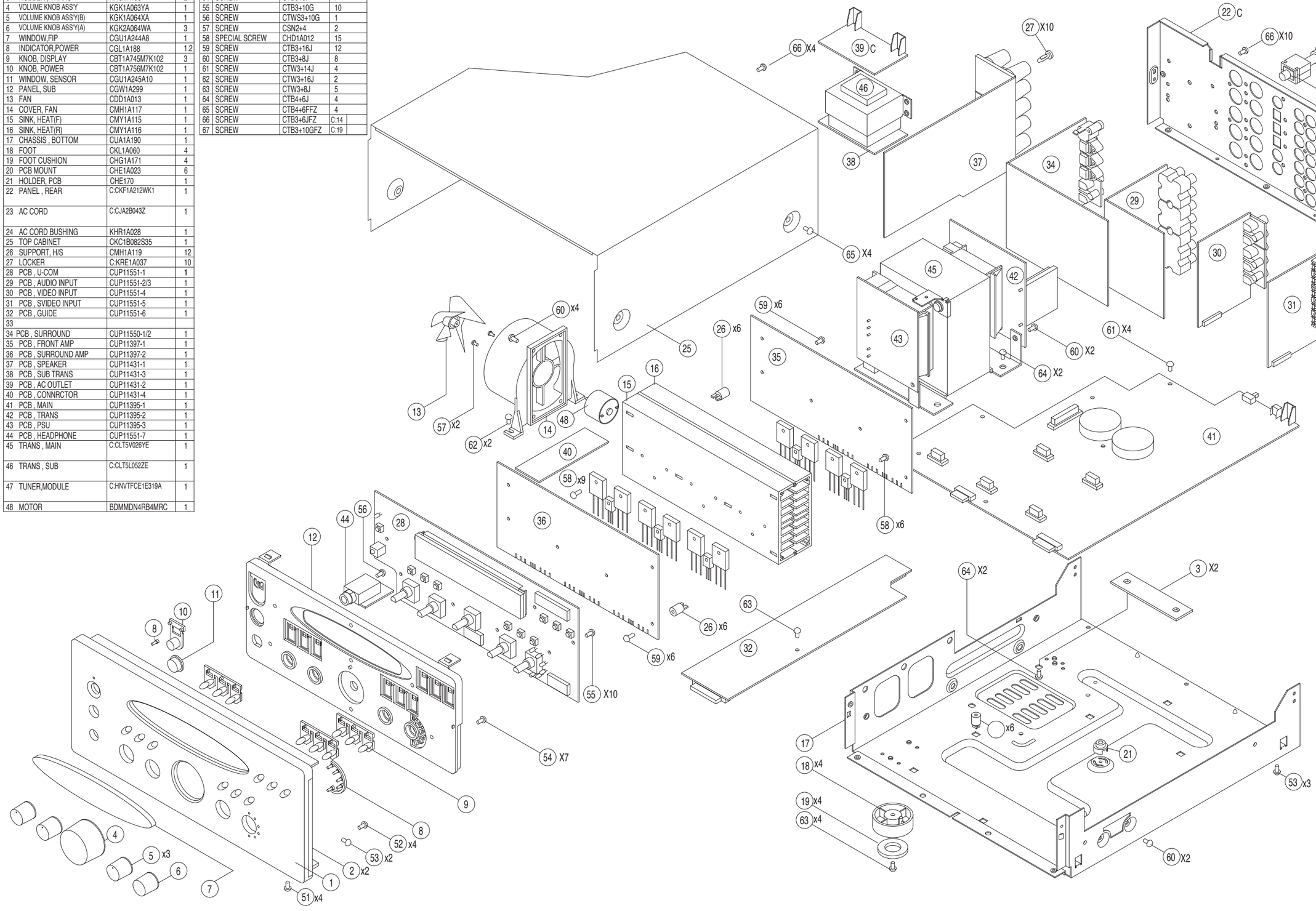


1. POWER ON/OFF button (L76/L56)
2. DEVICE SELECTOR buttons
3. PROGRAM buttons (L56)
4. CLEAR button (L56)
5. REPEAT button (L56)
6. INPUT SOURCE SELECTOR buttons(L76), NUMERIC buttons (L76/L56)
7. OSD ON/OFF buttons (L76), DVD SET UP button (L56)
8. MUTE button (L76)
9. PRESET UP/DOWN buttons (L76), SLOW buttons (L56)
10. TEST TONE button (L76), ZOOM button (L56)
11. SURROUND MODE button (L76), RANDOM button (L56)
12. VOLUME UP/DOWN buttons (L76)
13. AM button (L76), TITLE button (L56)
14. FM button (L76), MENU button (L56)
15. ARROW buttons (L76/L56)
16. ENTER button (L76/L56)
17. DIGITAL INPUT/ RDS button (L76), DVD DISPLAY button (L56)
18. SLEEP button (L76), RETURN button (L56)
19. OPEN/CLOSE button (L56)
20. STOP button (L56)
21. PAUSE button (L56)
22. REV SCAN/SKIP button (L56)
23. PLAY button (L56)
24. FOR SCAN/ SKIP button (L56)
25. SURROUND LEVEL UP/DOWN buttons (L76)
26. CENTER LEVEL UP/DOWN buttons (L76)
27. SUBWOOFER LEVEL UP/DOWN buttons (L76)

EXPLODED VIEW

N0	DESCRIPION	PARTS-NO	Q,ty
1	AL PANEL	KKM1A105XC37	1
2	SIDE BAR	KKM2A062C37	2
3	RUBBER , TRANS	KHG1A198	2
4	VOLUME KNOB ASS'Y	KGK1A063YA	1
5	VOLUME KNOB ASS'Y(B)	KGK1A064XA	1
6	VOLUME KNOB ASS'Y(A)	KGK2A064WA	3
7	WINDOW,FIP	CGU1A244A8	1
8	INDICATOR,POWER	CGL1A188	1.2
9	KNOB, DISPLAY	CBT1A745M7K102	3
10	KNOB, POWER	CBT1A756M7K102	1
11	WINDOW, SENSOR	CGU1A245A10	1
12	PANEL, SUB	CGW1A299	1
13	FAN	CDD1A013	1
14	COVER, FAN	CMH1A117	1
15	SINK, HEAT(F)	CMY1A115	1
16	SINK, HEAT(R)	CMY1A116	1
17	CHASSIS , BOTTOM	CUA1A190	1
18	FOOT	CKL1A060	4
19	FOOT CUSHION	CHG1A171	4
20	PCB MOUNT	CHE1A023	6
21	HOLDER, PCB	CHE170	1
22	PANEL , REAR	C:CKF1A212WK1	1
23	AC CORD	C:CJA2B043Z	1
24	AC CORD BUSHING	KHR1A028	1
25	TOP CABINET	CKC1B082S35	1
26	SUPPORT, H/S	CMH1A119	12
27	LOCKER	C:KRE1A037	10
28	PCB , U-COM	CUP11551-1	1
29	PCB , AUDIO INPUT	CUP11551-2/3	1
30	PCB , VIDEO INPUT	CUP11551-4	1
31	PCB , SVIDEO INPUT	CUP11551-5	1
32	PCB , GUIDE	CUP11551-6	1
33			
34	PCB , SURROUND	CUP11550-1/2	1
35	PCB , FRONT AMP	CUP11397-1	1
36	PCB , SURROUND AMP	CUP11397-2	1
37	PCB , SPEAKER	CUP11431-1	1
38	PCB , SUB TRANS	CUP11431-3	1
39	PCB , AC OUTLET	CUP11431-2	1
40	PCB , CONNRCTOR	CUP11431-4	1
41	PCB , MAIN	CUP11395-1	1
42	PCB , TRANS	CUP11395-2	1
43	PCB , PSU	CUP11395-3	1
44	PCB , HEADPHONE	CUP11551-7	1
45	TRANS , MAIN	C:CLT5V026YE	1
46	TRANS , SUB	C:CLT5L052ZE	1
47	TUNER,MODULE	C:HNVTFCE1E319A	1
48	MOTOR	BDMMDN4RB4MRC	1

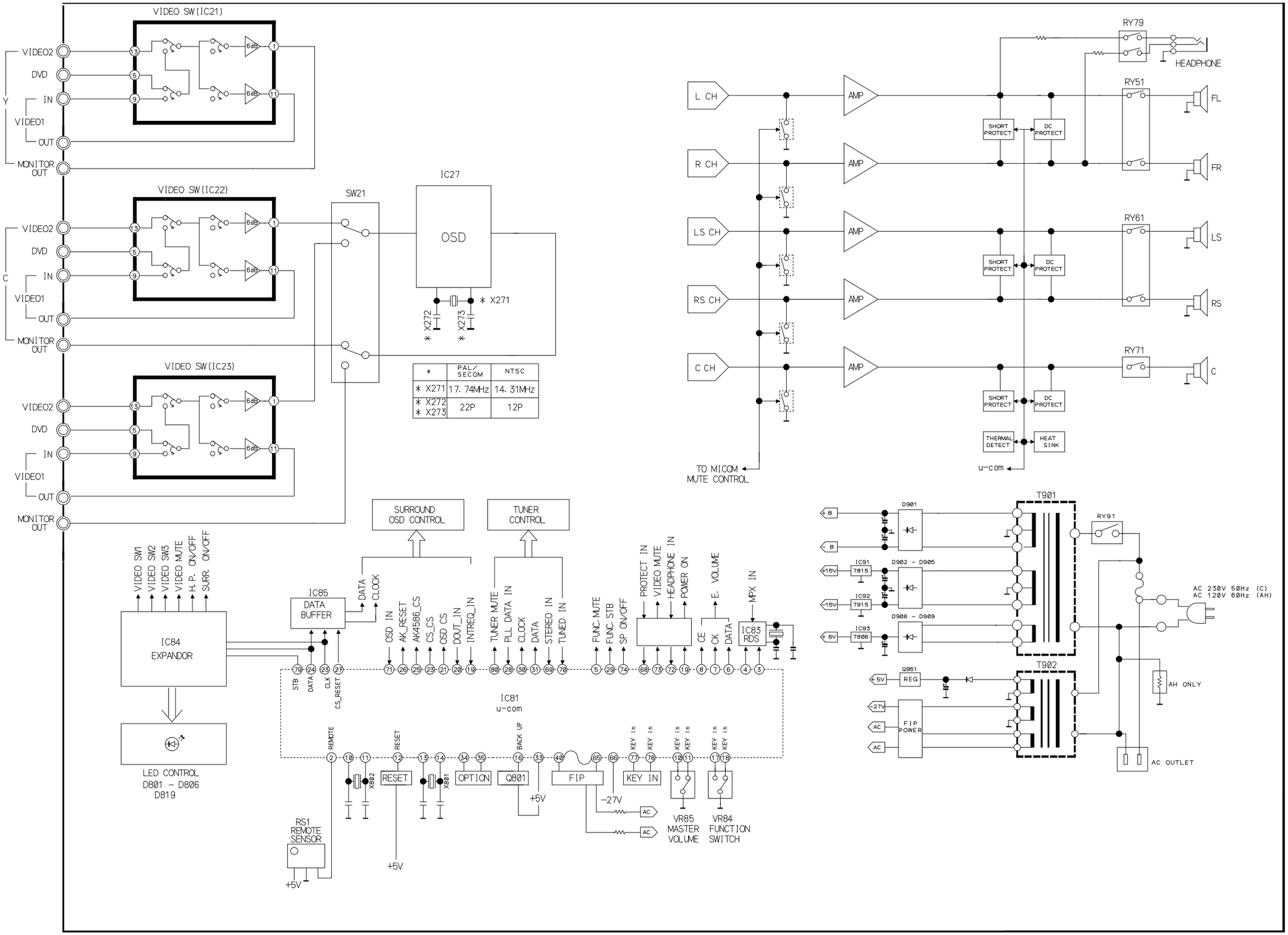
51	SCREW	CTS3+8J	4
52	SPECIAL SCREW	CHD1A016	4
53	SCREW	CTB3+6J	7
54	SCREW	CTB3+6F	7
55	SCREW	CTB3+10G	10
56	SCREW	CTWS3+10G	1
57	SCREW	CSN2+4	2
58	SPECIAL SCREW	CHD1A012	15
59	SCREW	CTB3+16J	12
60	SCREW	CTB3+8J	8
61	SCREW	CTW3+14J	4
62	SCREW	CTW3+16J	2
63	SCREW	CTW3+6J	5
64	SCREW	CTB4+6J	4
65	SCREW	CTB4+6FFZ	4
66	SCREW	CTB3+6JFZ	C:14
67	SCREW	CTB3+10GFZ	C:19



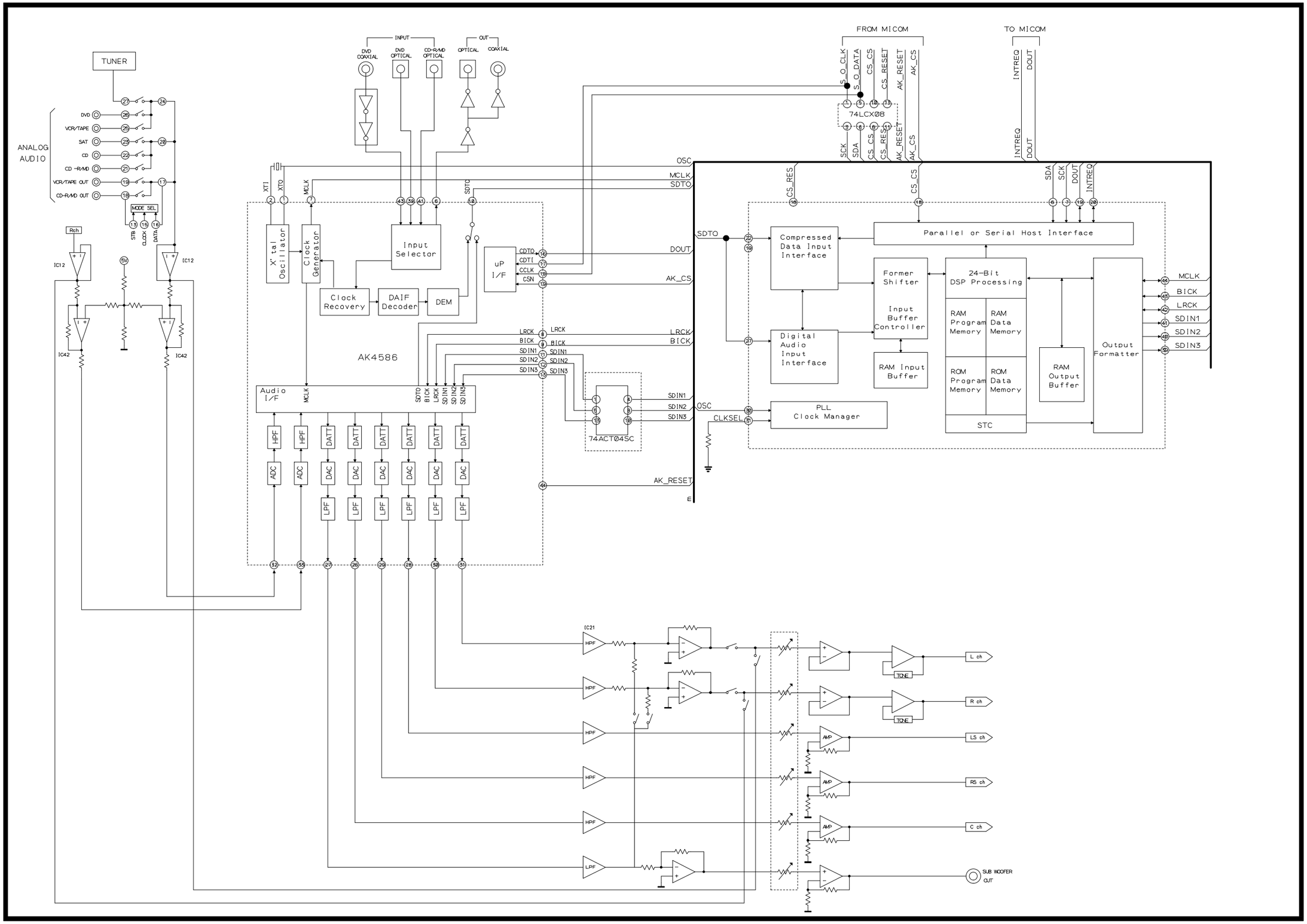
1-9

1-10

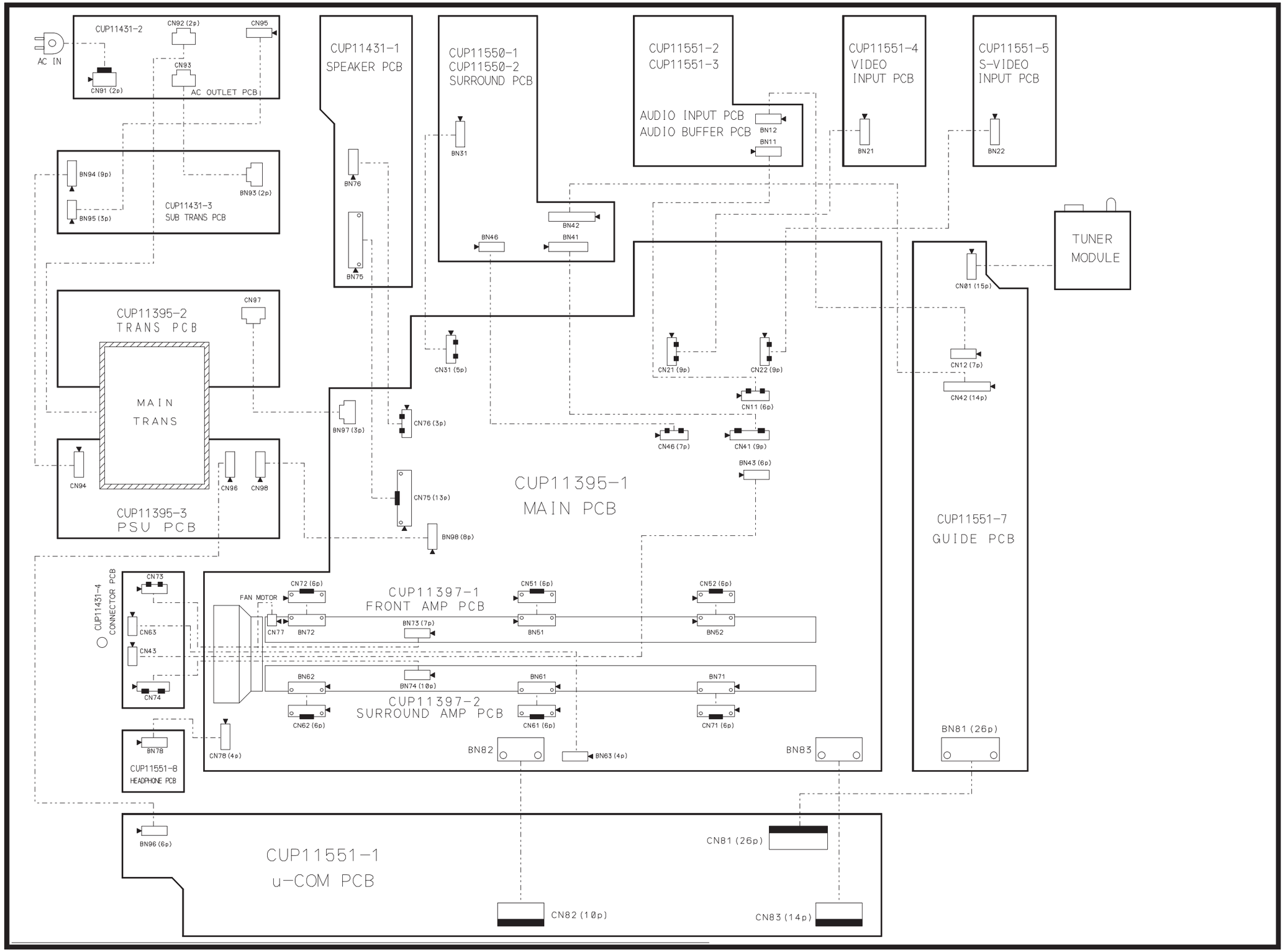
1. BLOCK DIAGRAM



BLOCK DIAGRAM

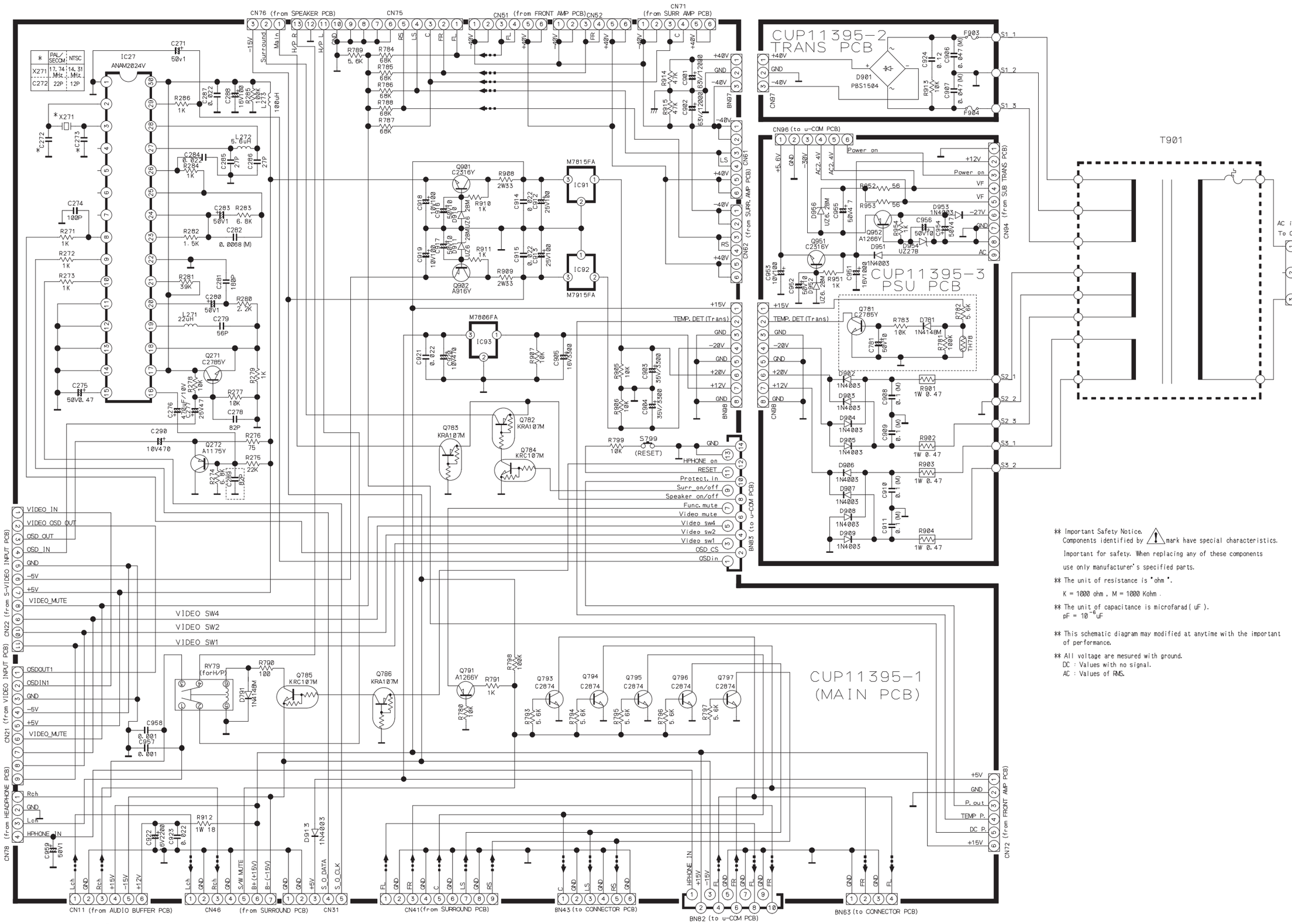


2. WIRING DIAGRAM



3. SCHEMATIC DIAGRAMS

MAIN SCHEMATIC DIAGRAMS



※ Important Safety Notice.
Components identified by ⚠ mark have special characteristics.
Important for safety. When replacing any of these components
use only manufacturer's specified parts.

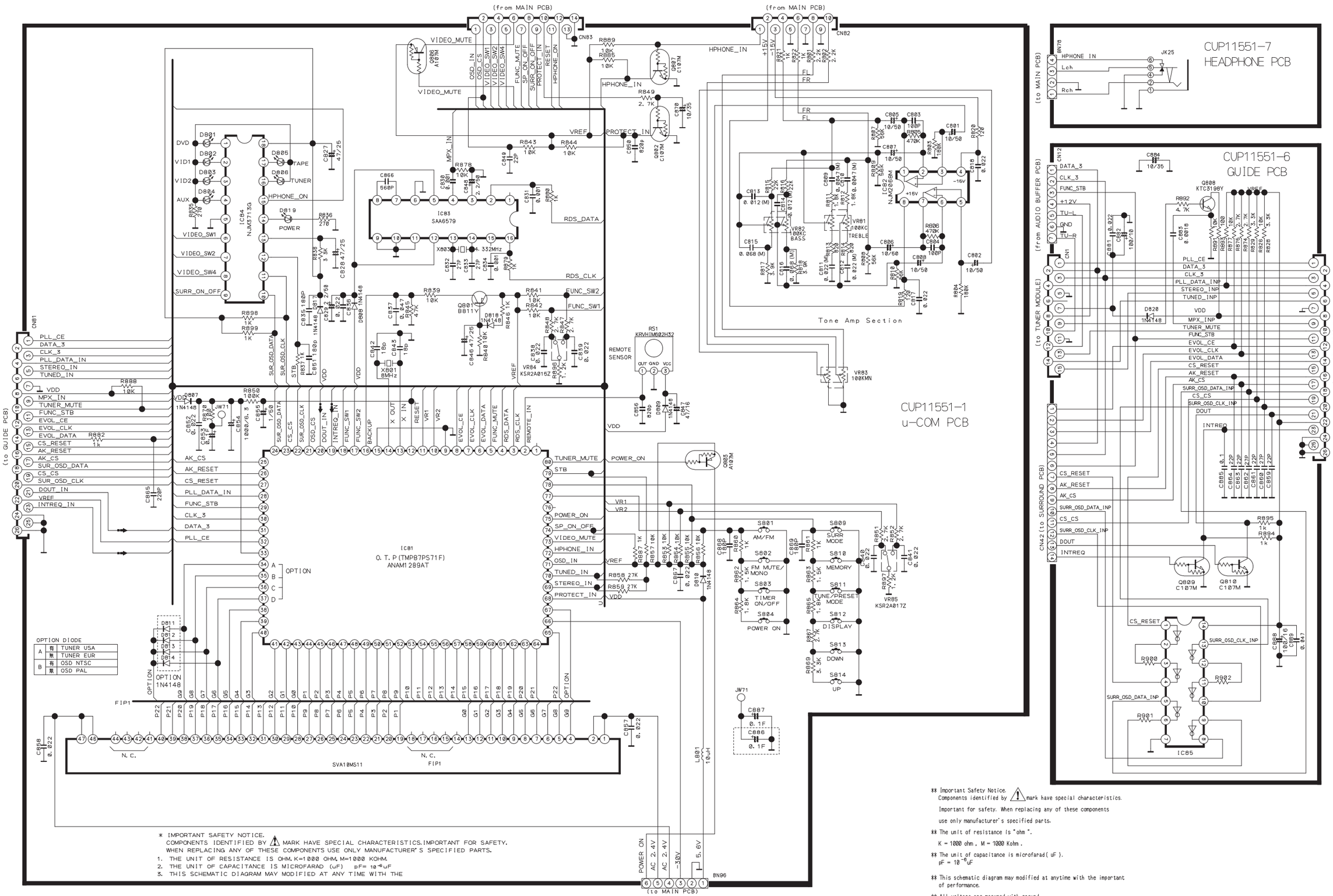
※ The unit of resistance is "ohm".
K = 1000 ohm , M = 1000 Kohm .

※ The unit of capacitance is microfarad(uF).
pF = 10^{-6} uF

※ This schematic diagram may modified at anytime with the important of performance.

※ All voltage are mesured with ground.
DC : Values with no signal.
AC : Values of RMS.

u-COM & GUIDE CIRCUIT DIAGRAM



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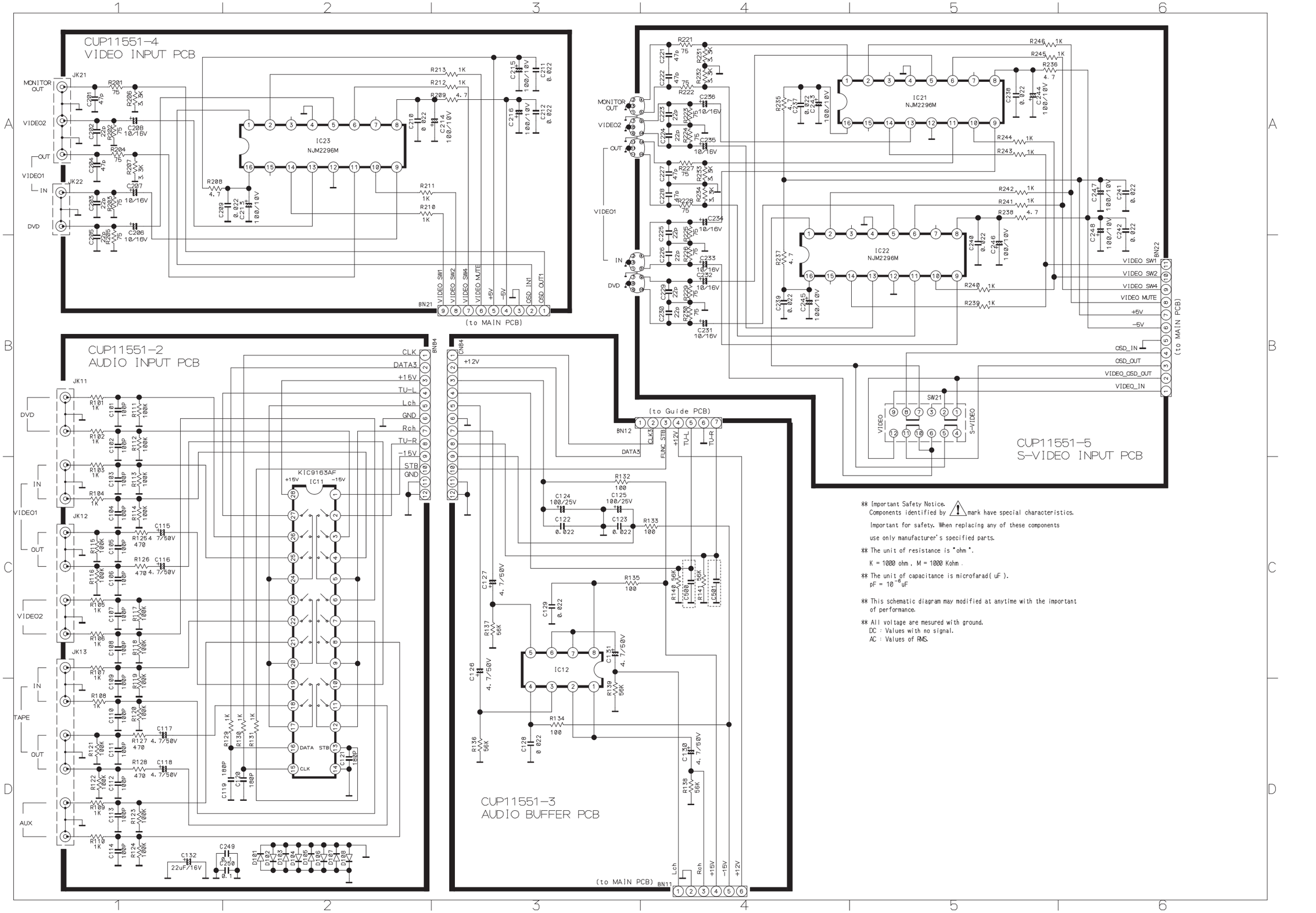
INPUT SCHEMATIC DIAGRAM



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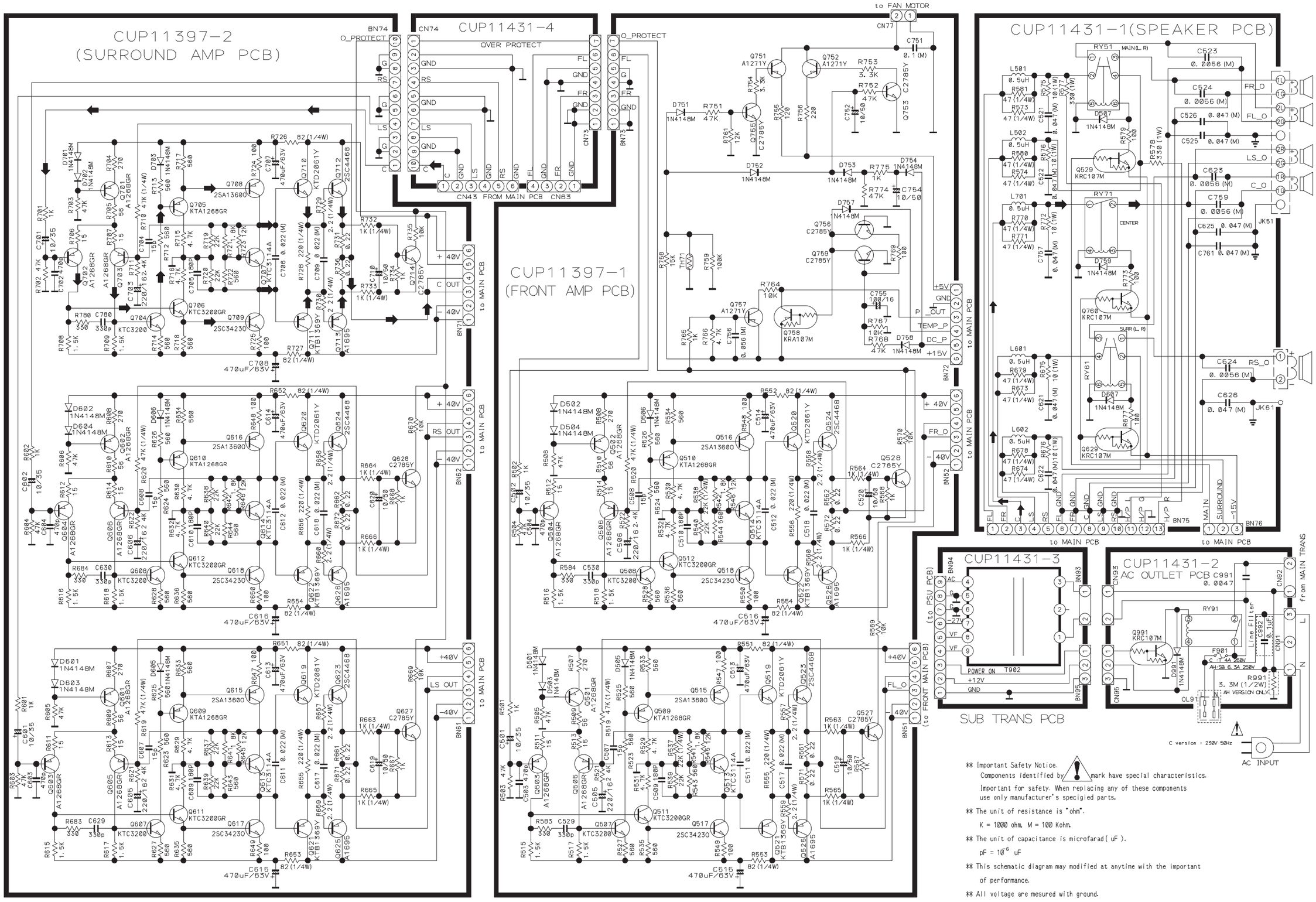
AMP, SPEAKER, SUB TRANS & AC OUTLET CIRCUIT DIAGRAM



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K = 1000 ohm, M = 100 Kohm.

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pF = 10^{-6} uF

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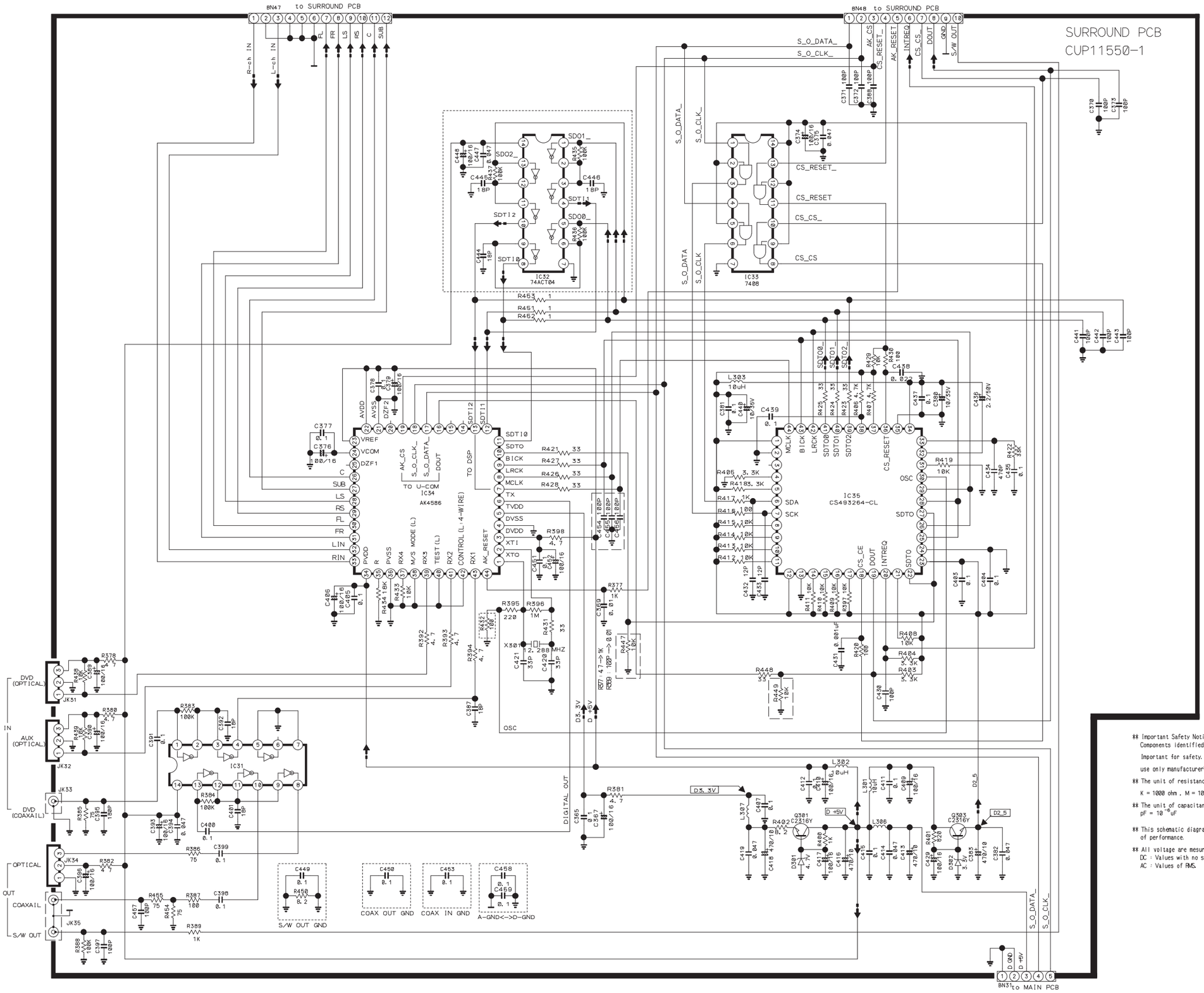
AC : Values of RMS.

SURROUND CIRCUIT DIAGRAM



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K = 1000 ohm . M = 1000 Kohm .

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pF = 10^{-6}uF

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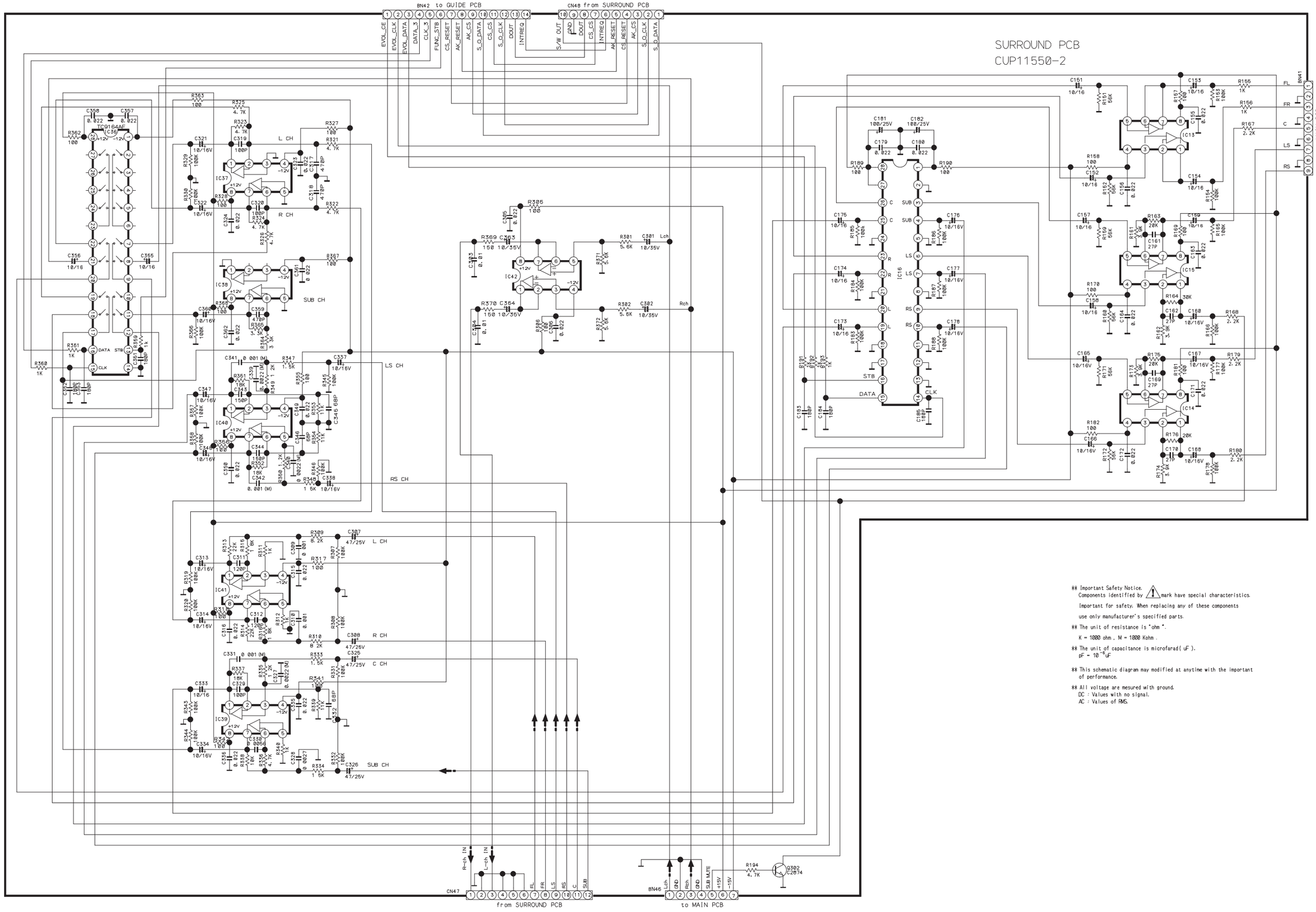
AC : Values of RMS.

SURROUND CIRCUIT DIAGRAM



** Important Safety Notice.
Components identified by ⚠ mark have special characteristics.
Important for safety. When replacing any of these components
use only manufacturer's specified parts.

** The unit of resistance is "ohm".
K = 1000 ohm, M = 1000 Kohm.

** The unit of capacitance is microfarad(uF).
pF = 10^{-6} uF

** This schematic diagram may modified at anytime with the important of performance.

** All voltage are mesured with ground.
DC : Values with no signal.
AC : Values of RMS.

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ELECTRICAL CONTENTS

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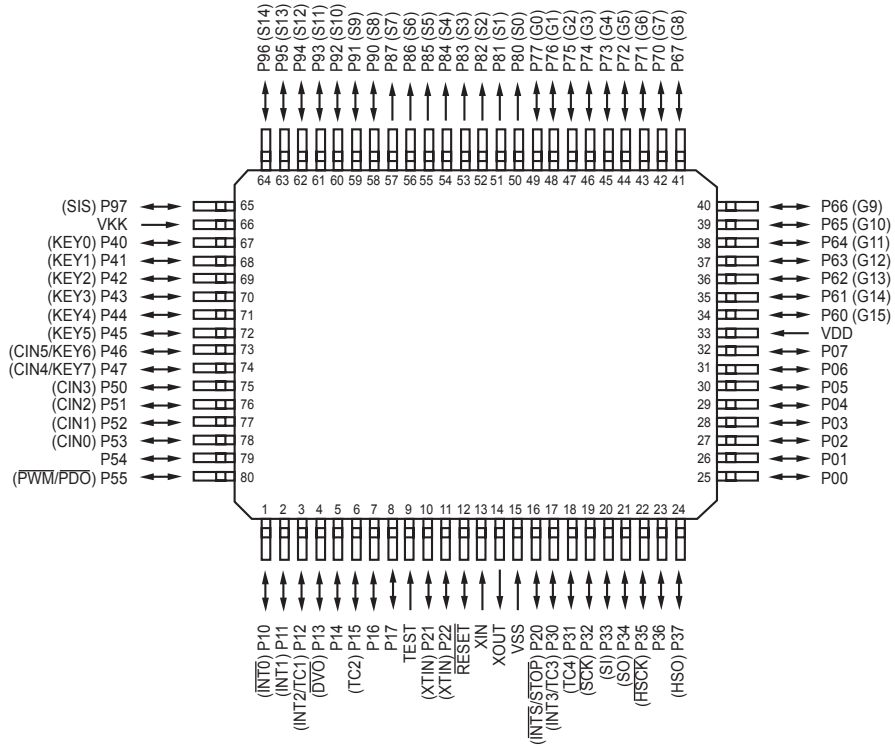
IC PIN FUNCTION (u-COM : ANAM1328AT,O.T.P : TMP87PS71AF) : IC81

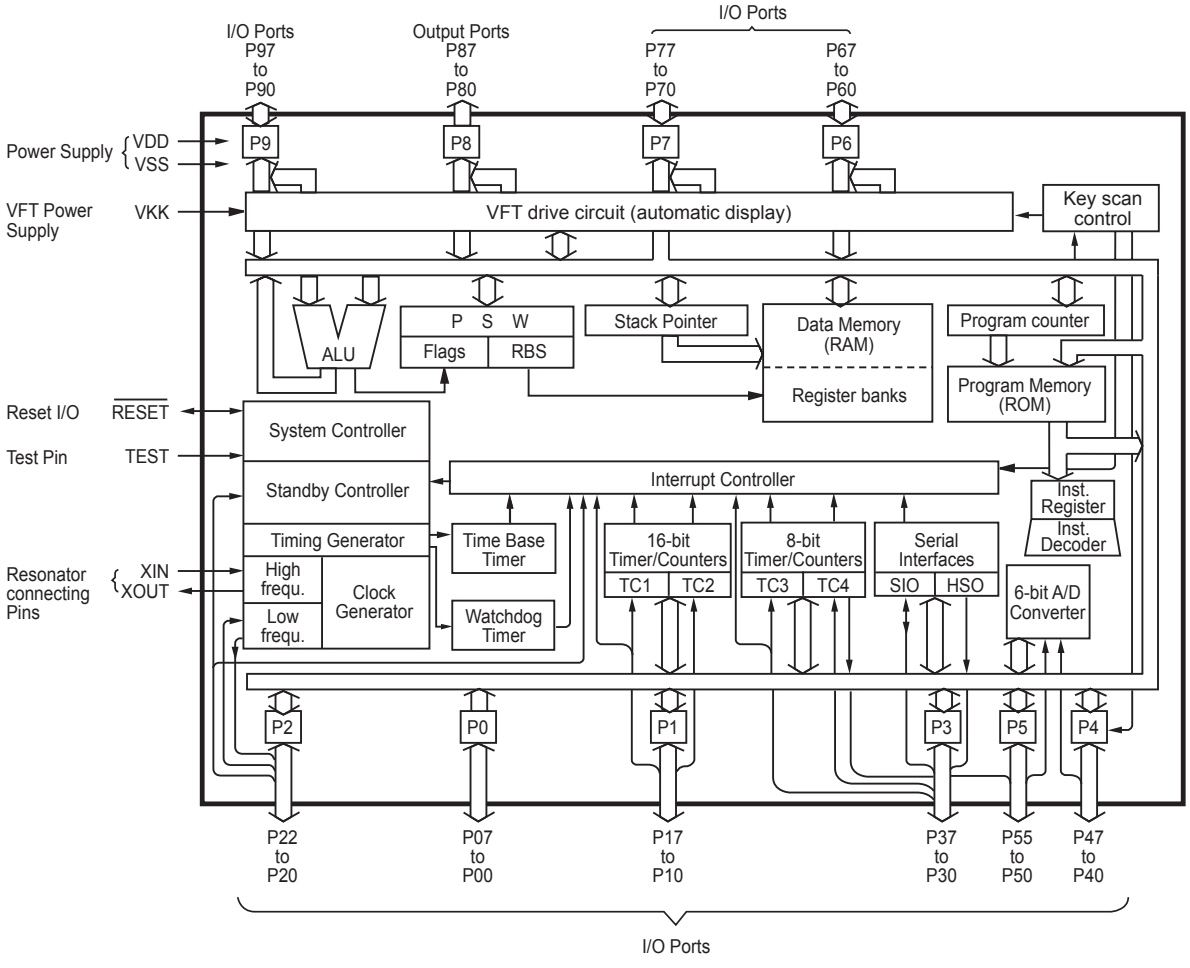
PIN No.	SYMBOL	I/O	DESCRIPTION
1	-	-	Not Use (No connection)
2	REMOTE IN	I	Remote Control Sensor Data Input
3	RDS CLK	O	RDS IC (SA6579TV1) CLK/Data Port
4	RDS DATA	I	
5	Function Mute	O	Function Mute Control Output port (Active “H”)
6	EVOL Data	O	Electronic Vol. IC (TC9482F) Data/CLK/STB Port
7	EVOL CLK	O	
8	EVOL CE (STB)	O	
9	Vpp (Test)	-	Program Supply Voltage (GND Connection)
10	Volume 2	I	Master Volume (ENCODER) UP/DOWN control port
11	Volume 1	I	
12	RESET	I	Reset Input Port (“L”)
13	X IN	I	8MHz Cystal Connection Port
14	X OUT	O	
15	Vss (GND)	I	Device GND Port
16	Back Up	I	Back Up Mode Control Port (“L”)
17	Function SW 2	I	Function Selector (ENCODER) Control port
18	Function SW 1	I	
19	INTREQ	I	Interrupt Reguest Input Port
20	D OUT	O	CS493264-CL Data Input port
21	OSD CS	O	ODS IC (ANAM2024V) Chip Selector Port
22	Surr./OSD CLK	O	Surr./OSD CLK Output port
23	CS CS	O	Chip Selector port for CS493264-CL
24	Surr./OSD Data	O	Surr./OSD Data Output Port
25	AK CS	O	Chip Selector Port for AK4586VQ
26	AK RESET	O	Reset (Initial Clear) Port for AK4586VQ
27	CS RESET	O	Reset (Initial Clear) Port for CS493264-CL
28	PLL Data In	I	PLL IC (LC72131) Data Input Port
29	Func. STB	O	Func. IC (KIC9163/64) Strobe Control Port
30	CLK 3	O	Func./PLL IC CLK Control Port
31	DATA 3	O	Func./PLL IC Data Control Port
32	PLL CE	O	PLL IC (LC72131) Chip Enable Control Port
33	VDD/VCC	-	Power Supply Port (+5V)
34 ~ 35	Option/VFL Grid	O	Option Control Port/ VFL Grid Control Port
36 ~ 43	VFL Grid	O	VFL Grid Control Port
44 ~ 65	FIP Segment	O	VFL Segment Control Port
66	Vkk	-	VFL Power Supply Port (-30V)
67	Option	I	Option Control Port
68	Protect IN	I	Protect Input Port (“L”)
69	Stereo IN	I	Stereo Display Control Port (“L”)
70	Tuned IN	I	Tuned Display Control Port (“L”)
71	OSD IN	I	ODS Input Control Port
72	Hphone IN	I	Headphone In/ Out Defect Port
73	Video Mute	O	Videon Mute Control Port (“L”)
74	SP ON/OFF	I	Speaker ON/OFF Control Port
75	Power ON/OFF	O	Power ON/OFF Control Port (Actire "L")
77, 78	KEY Matrix	I	Key Control Input Port
79	STB	O	Extended IC (NJU3713G) Strobe Control Port
80	Tuner Mute	O	Tuner Mute Control Port

u-COM IC PIN ASSIGNMENT & BLOCK DIAGRAM

■ PIN ASSIGNMENTS (TOP VIEW)



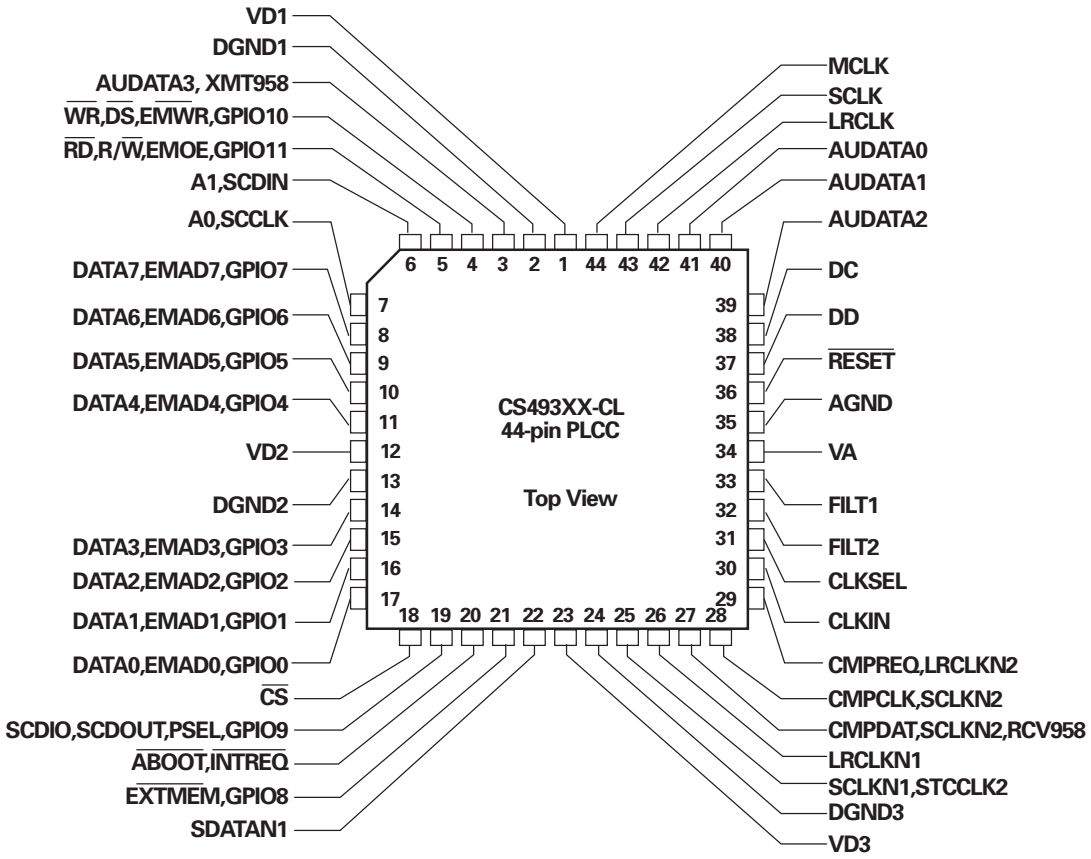
■ BLOCK DIAGRAM



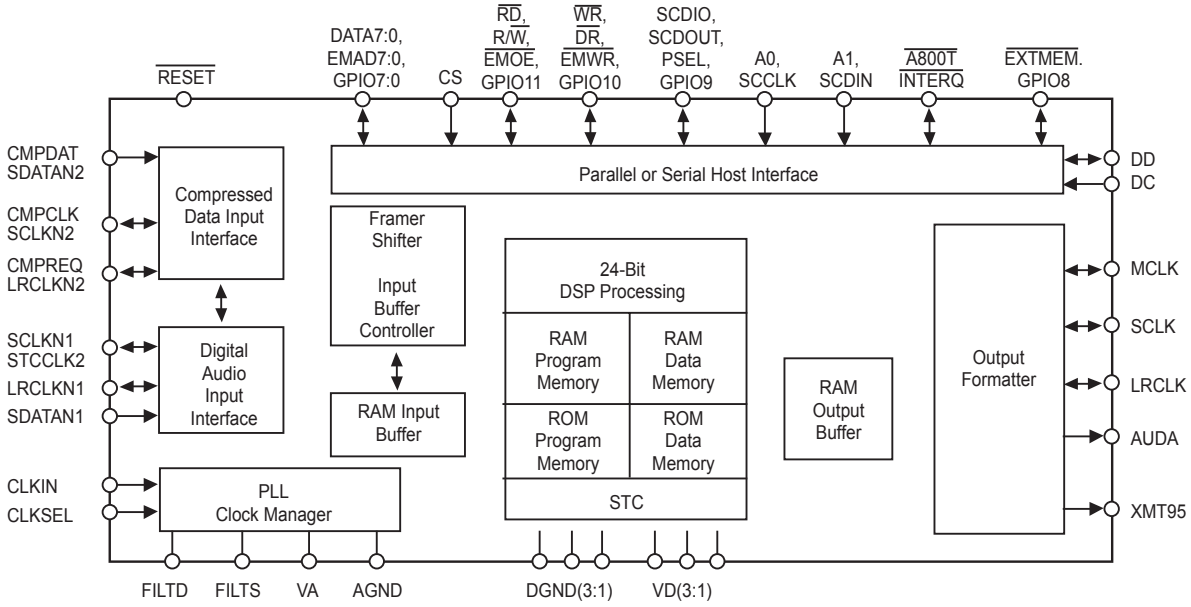
AUDIO DSP(CS493264-CL : IC35)

PIN No.	Pin Name	I/O	Function
1,12,23	+VD1	-	Digital Power supply. Normally +2.5v
2,13,24	DGND	-	Digital Ground
3	AUD3	O	SPDIF transmitter output/Digital audio output(N.C)
4	WR	I	Host write strobe pin(connected to GND with an external resistor)
5	RD	I	Host parallel output enable pin(pulled up with an external resistor)
6	CS_DA	I	SPI Serial data input pin
7	CS_CK	I	Serial control clock input pin
8	EMAD7	I/O	Serial data IN/OUTPUT pins(pulled up with an external resistor)
9	EMAD6	I/O	
10	EMAD5	I/O	
11	EMAD4	I/O	
14	EMAD3	I/O	
15	EMAD2	I/O	
16	EMAD1	I/O	
17	EMAD0	I/O	
18	CS_CE	I	Host parallel chip select pin
19	SCDIO(AK_DOUT)	O	Serial control port data ouput pin
20	INTREQ	O	Control port interrupt request output pin
21	EXTMEM	I/O	External Memory Chip Selector(pulled up with an external resistor)
22	SDATAN1(SDI)	I	PCM audio data input number 1 pin
25	SCLKN1(BICK)	I	PCM audio input bit clock pin
26	LRCLKN1(LRCK)	I	PCM audio input sample rate clock pin
27	CMPDAT(SDI)	I	PCM audio data input number 2 pin
28	CMPCLK(BICK)	I	PCM audio input bit clock pin
29	CREQ(LRCK)	I	PCM audio input sample rate clock pin
30	CLKIN(XIN)	I	Master clock input(used external clock)
31	CLKSEL(GND)	I	DSP clock mode select pin: connect the GND
32	FILT1		Connects to an external filter for the on-chip phase-locked loop
33	FILT1		Connects to an external filter for the on-chip phase-locked loop
34	+2.5V	-	Analog Power supply for clock generator . Normally +2.5V
35	AGND	-	Analog ground supply for clock generator PLL.
36	RESET(CS_RST)	I	Master reset input pin
37	DBDATA	-	Reserved pin and should be pulled up with an external resistor.
38	DBCLK	-	Reserved pin and should be pulled up with an external resistor.
39	AUD2(SDO2)	O	PCM multi-format digital-audio data ouput2 pin
40	AUD1(SDO1)	O	PCM multi-format digital-audio data ouput1 pin
41	AUD0(SDO0)	O	PCM multi-format digital-audio data ouput0 pin
42	LRCLK	I	Audio output sample rate clock pin
43	SCLK(BICK)	I	Audio ouput bit clock pin
44	MCLK	I	Audio master clock output pin

■ PIN ASSIGNMENT.(IC35: CS493264-CL)



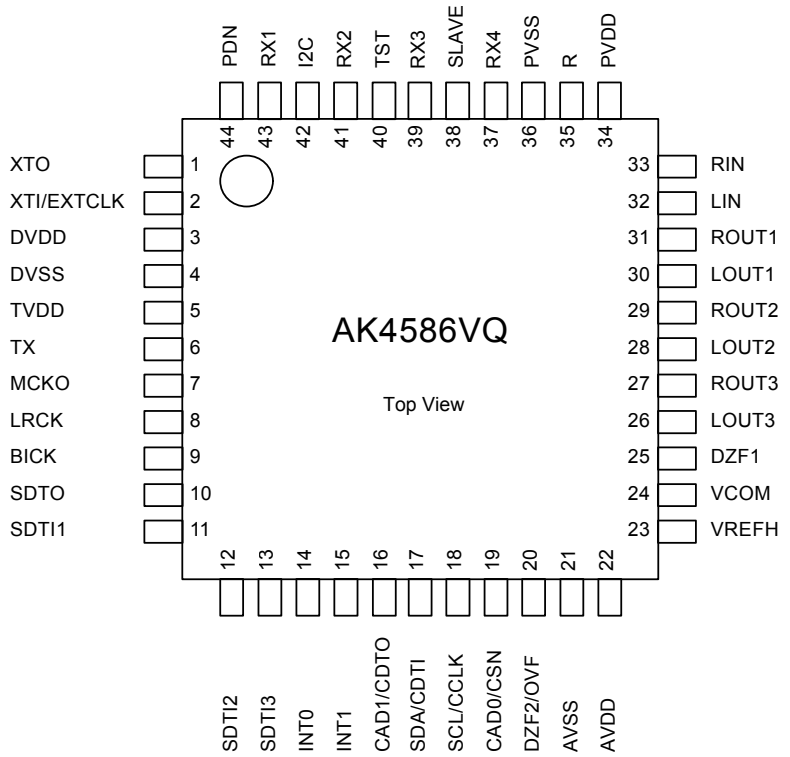
■ BIOCK DIAGRAM(IC35: CS493264-CL)



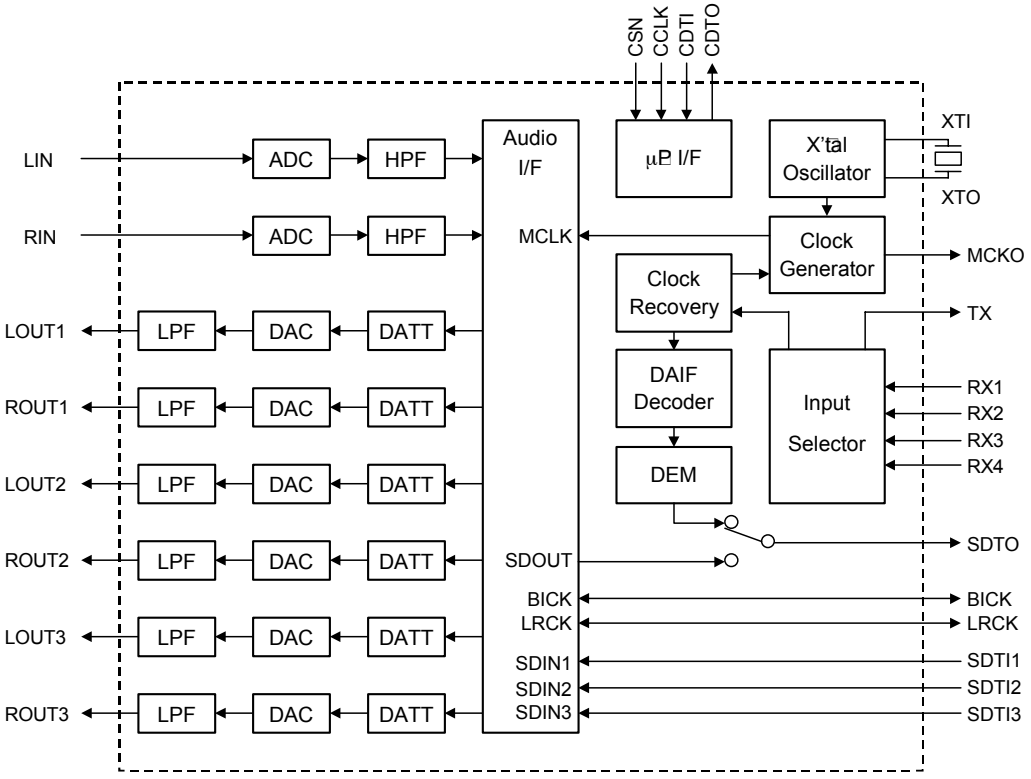
PIN/FUNCTION (IC34: AK4586VQ)

No.	Pin Name	I/O	Function
1	XTO	O	X'tal Output Pin
2	XTI	I	X'tal Input Pin
	EXTCLK	I	External Master Clock Input Pin
3	DVDD	-	Digital Power Supply Pin, 4.5V 5.5V
4	DVSS	-	Digital Ground Pin, 0V
5	TVDD	-	Output Buffer Power Supply Pin, 2.7V 5.5V
6	TX	O	Transmit channel (through data) Output Pin
7	MCKO	O	Master Clock Output Pin
8	LRCK	I/O	Input/Output Channel Clock Pin
9	BICK	I/O	Audio Serial Data Clock Pin
10	SDTO	O	Audio Serial Data Output Pin
11	SDTI1	I	DAC1 Audio Serial Data Input Pin
12	SDTI2	I	DAC2 Audio Serial Data Input Pin
13	SDTI3	I	DAC3 Audio Serial Data Input Pin
14	INT0	O	Interrupt 0 pin
15	INT1	O	Interrupt 1 pin
16	CDTO	O	Control Data Output Pin in 4-wire serial control mode
	CAD1	I	Chip Address 1 Pin in I^2C bus control mode
17	CDTI	I	Control Data Input Pin in 4-wire serial control mode
	SDA	I/O	Control Data Input/Output Pin in I^2C bus control mode
18	CCLK	I	Control Data Clock Pin in 4-wire serial control mode
	SCL	I	Control Data Clock Pin in I^2C bus control mode
19	CSN	I	Chip Select Pin in 4-wire serial control mode
	CAD0	I	Chip Address 0 Pin in I^2C bus control mode
20	DZF2	O	Zero Input Detect 2 Pin (Note 1) When the input data of the group 1 follow total 8192 LRCK cycles with "0 " input data, this pin goes to "H".
	OVF	O	Analog Input Overflow Detect Pin (Note 2) This pin goes to "H" if the analog input of Lch or Rch is overflows.
21	AVSS	-	Analog Ground Pin, 0V
22	AVDD	-	Analog Power Supply Pin, 4.5V 5.5V
23	VREFH	I	Positive Voltage Reference Input Pin, AVDD
24	VCOM	O	Common Voltage Output Pin, AVDD/2 Large external capacitor around 2.2μF is used to reduce powersupply noise.
25	DZF1	O	Zero Input Detect 1 Pin (Note 1) When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H".
26	LOUT3	O	DAC3 Lch Analog Output Pin
27	ROUT3	O	DAC3 Rch Analog Output Pin
28	LOUT2	O	DAC2 Lch Analog Output Pin
29	ROUT2	O	DAC2 Rch Analog Output Pin
30	LOUT1	O	DAC1 Lch Analog Output Pin
31	ROUT1	O	DAC1 Rch Analog Output Pin
32	LIN	I	Lch Analog Input Pin
33	RIN	I	Rch Analog Input Pin
34	PVDD	-	PLL Power Supply Pin, 4.5V 5.5V
35	R	-	External Resistor Pin 18Ω +/-1% resistor to PVSS externally.
36	PVSS	-	PLL Ground Pin, 0V
37	RX4	I	Receiver Channel 4 Pin (Internal biased pin)
38	SLAVE	I	Slave Mode Pin "L ": Master mode or Slave mode, "H": Slave mode
39	RX3	I	Receiver Channel 3 Pin (Internal biased pin)
40	TST	I	Test Pin This pin should be connected to DVSS.
41	RX2	I	Receiver Channel 2 Pin (Internal biased pin)
42	I2C	I	Control Mode Select Pin "L ": 4-wire Serial, "H": I^2C Bus
43	RX1	I	Receiver Channel 1 Pin (Internal biased pin)
44	PDN	I	Power-Down & Reset Pin When "L ", the AK4586 is powered-down, all output pins go to "L " and the control registers are reset to default state. If the state of CAD1-0 changes, then the AK4586 must be reset by PDN.

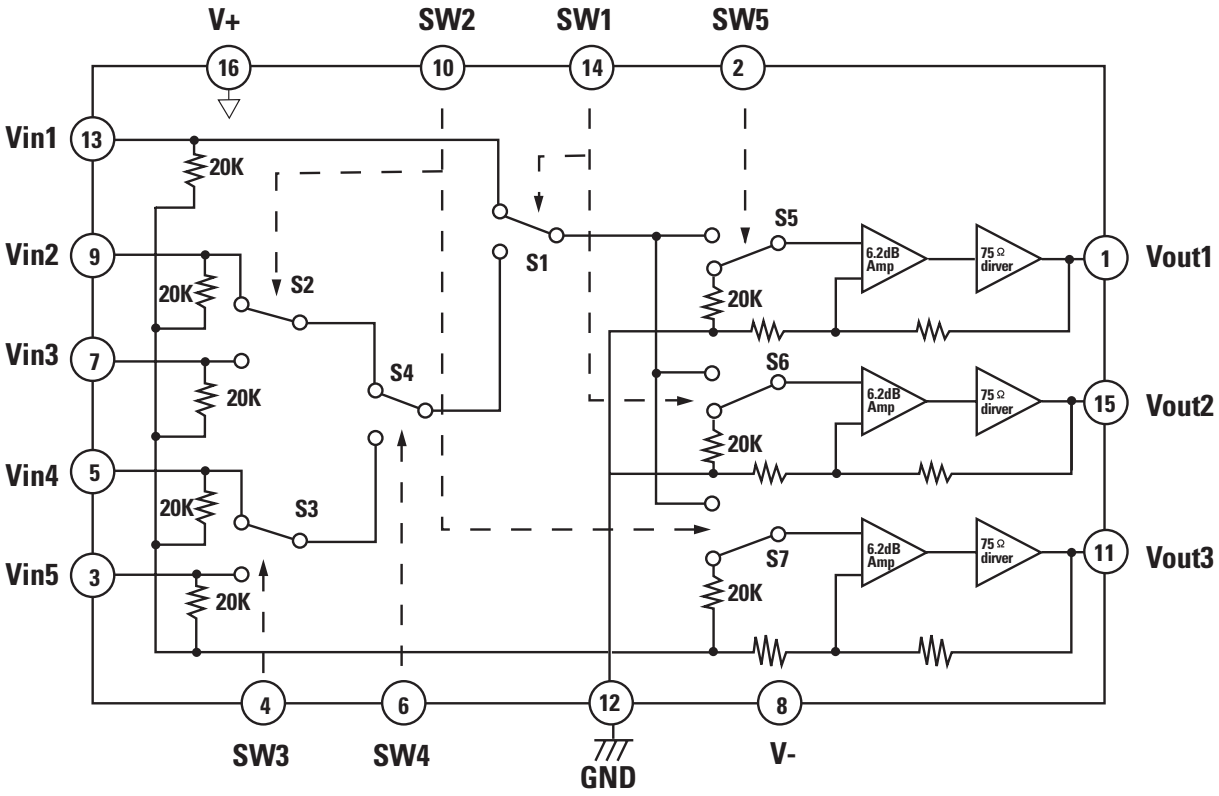
■ PIN ASSIGNMENT (IC42: AK4586VQ)



■ BLOCK DIAGRAM (IC42: AK4586VQ)



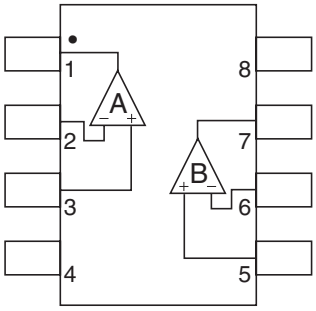
NJM2296M (VIDEO SW / IC21, 22, 23)



∗ Normally mute
Above circuits show that the switches are set at low.

OPA2134UA / NJM 2068MD (OP AMP / IC12~15, 37~42, 82)

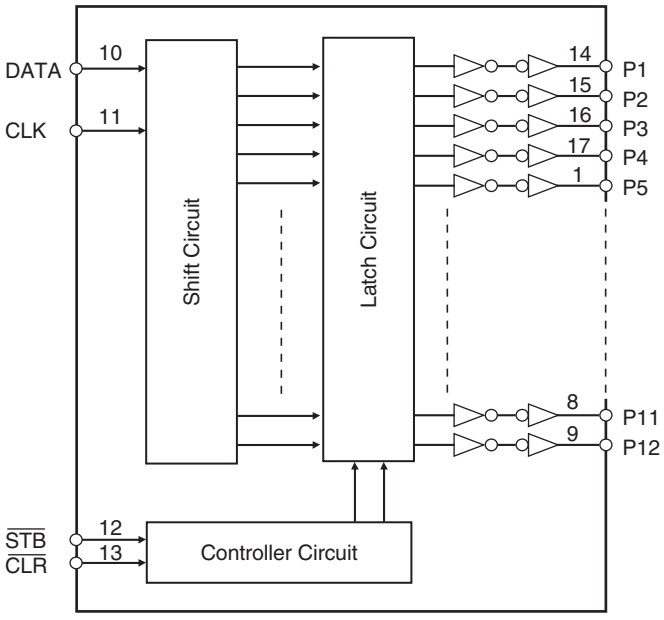
■ PIN CONFIGURATION



PIN FUNCITON
1. A OUTPUT
2. A-INPUT
3. A+INPUT
4. V^-
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V^+

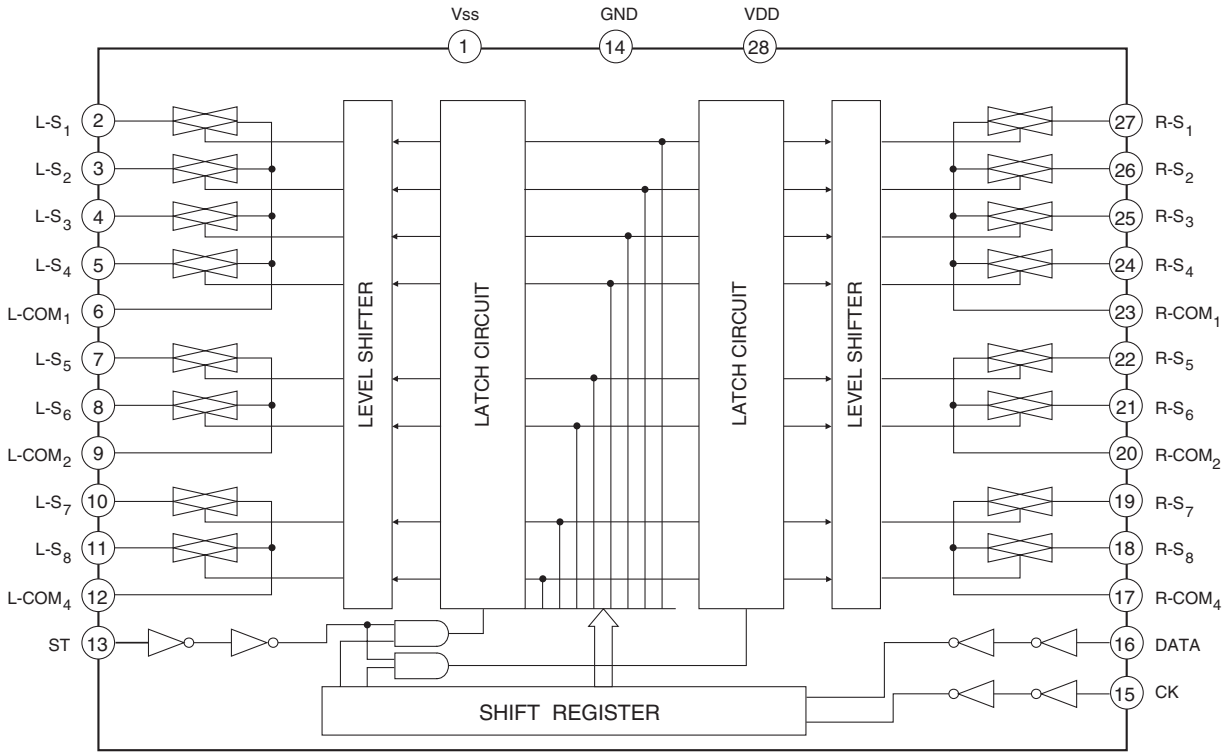
NJU3713G (EXPANDOR : IC 84)

■ BLOCK DIAGRAM



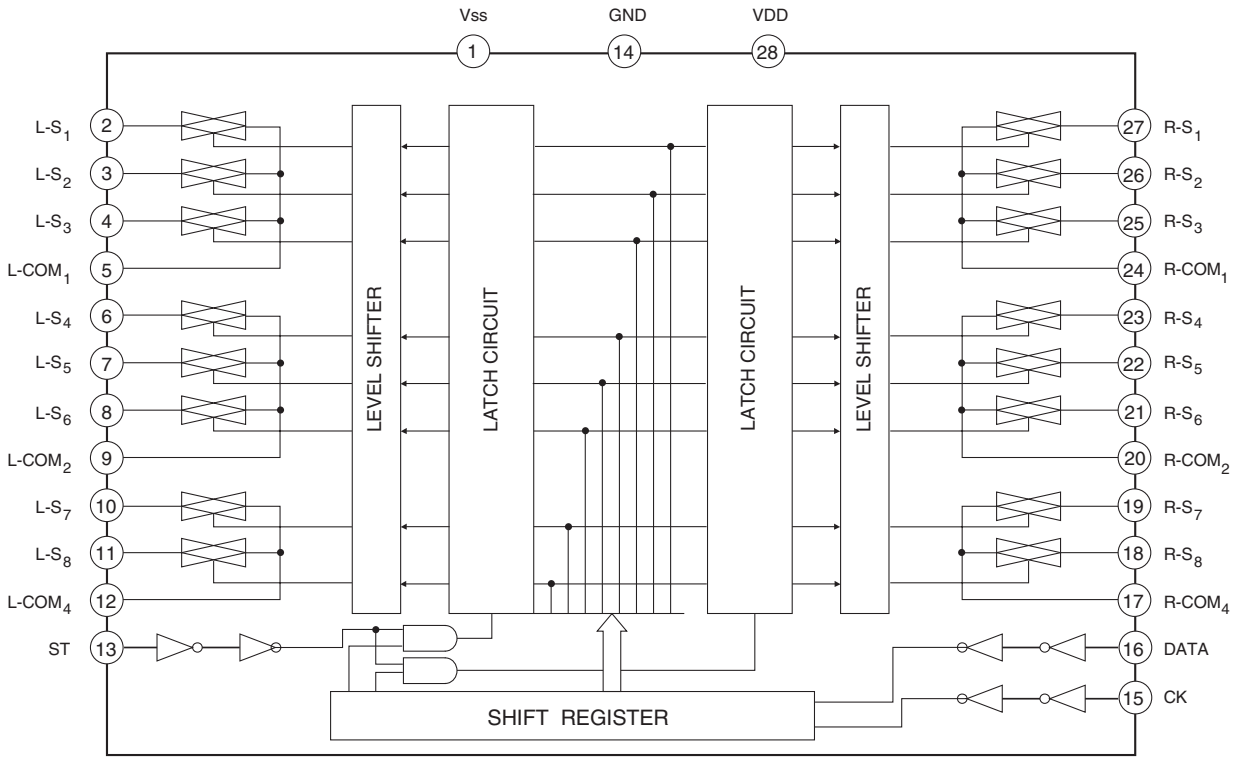
TC9164AF (FUNCTION /IC34)

■ BLOCK DIAGRAM

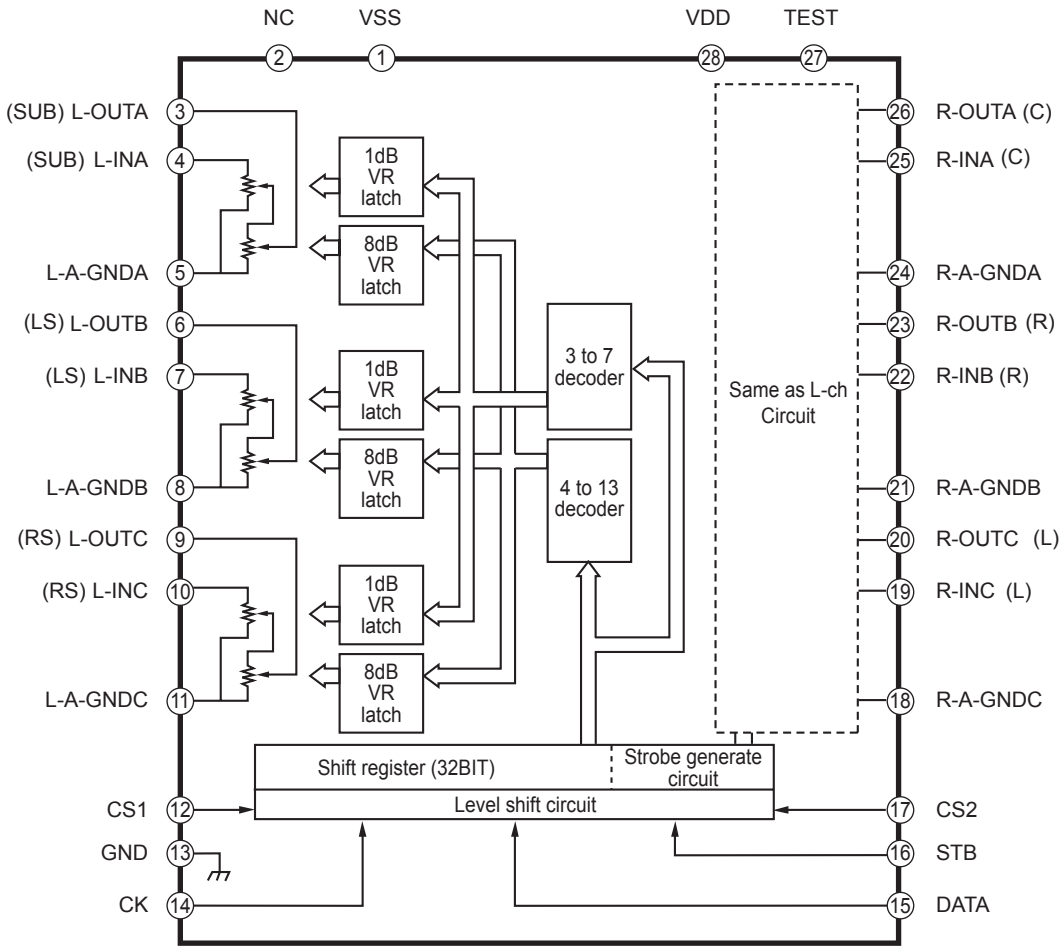


TC9163AF (FUNCTION /IC11)

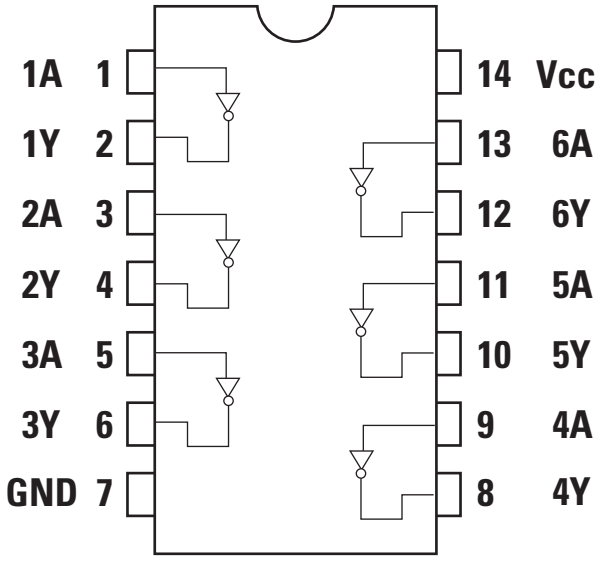
■ BLOCK DIAGRAM



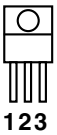
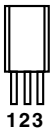
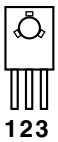
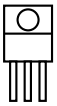
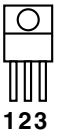
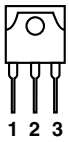
TC9482F (ELECTRONIC VOLUME/IC16)



TC74 HCU04AFN (INVERTOR /IC31)



TRANSISTOR, REGULATOR IC BLOCK DIAGRAM

TO-92L 1. Emitter 2. Collector 3. Base KSA1175Y DTC144TS KTA1271Y KSD811Y DTC144ES DTA144ES DTA114YS DTC114YS DTC143TS DTA144TS	TO-92 1. Emitter 2. Collector 3. Base KTD1302T KTA1268GR KTC3200GR KSC2785Y KTC31940	TO-220  1. DC IN 2. DC OUT 3. GND MC7915C	TO-92L  1. Emitter 2. Collector 3. Base KSA916Y KSC2316Y
TO-126  1. Emitter 2. Collector 3. Base 2SC4137V KSC34230 2SD13600	TO-220  1. Base 2. Collector 3. Emitter KSA614Y KSD288Y 2SB1186AE 2SD1763AE	TO-220  1. DC IN 2. GND 3. DC OUT MC7815C MC7805C	TO-3P  1. Base 2. Collector 3. Emitter 2SD3856 2SC4468 2SA1492 2SA1695

SECTION 3
ELECTRICAL PARTS LIST

■ RESISTORS AND CAPACITORS

Notes : • Part numbers are indicated for most mechanical parts.
Please use this part number for parts order.
• The unit of resistance is OHM (Ω)
K=1000 (Ω), M=1000 (KΩ)
• The unit of capacitance is MICROFARAD (μF)
P=10 $^{-6}\mu$F

■ Numbering System of Resistor
Example

KRD (Type) 25 (Wattage) F (Shape) J (Tolerance) 101 (Value)

Resistor Type	Wattage	Tolerance
CRD: Carbon CRG: Metal Oxide KRF: Metal Cement CRQ: Fusible	20:1/5W 25:1/4W 50:1/2W 1:1W 2:2W 3:3W	F:= ±1% J:= ±5% K:= ±10%

■ Numbering System of Capacitor
Example

CCKR (Type) 1H (Voltage) 101 (Value) K (Tolerance) B (Peculiarity)

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
HCB:Ceramic CCC:Ceramic CCK:Ceramic HCQI:Polyester KCQP:Polypropylene KCQS:Polystyrol KCEA:ELECT KCF:SEMI KCFE:FILM	0J:6.3V 1A:10V 1C:16V 1E:25V 1H:50V 1V:35V 2A:100V	1H:50V DC 1:125V DC KC:400V AC 25:250V AC	C: ±0.25pF G: ±2% J: ±5% K: ±10% Z: +80%, –20%

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
	MAIN B`D(CUP11395-1,2,3)		
	PCB1 CUP11395-1	**PCB , MAIN**	**L76**
C271	HCEA1HH1R0T	CAP , ELECT	1.0UF 50V
C272 , C273	CCCT1H220JC	CAP , CERAMIC	22PF 50V J
C274	CCKT1H101KB	CAP , CERAMIC	100PF 50 K
C275	HCEA1HHR47T	CAP , ELECT	0.47UF 50V
C276	HCEA1AH471T	CAP , ELECT	470UF 10V
C277	HCEA1EH470T	CAP , ELECT	47UF 25V
C278	CCCT1H820JC	CAP , CERAMIC	82PF 50V J
C279	CCCT1H560JC	CAP , CERAMIC	56PF 50V J
C280	HCEA1HH1R0T	CAP , ELECT	1.0UF 50V
C281	CCKT1H181KB	CAP , CERAMIC	180PF 50V J
C282	HCQI1H682JZT	CAP , MYLAR	6800PF 50 J
C283	HCEA1HH1R0T	CAP , ELECT	1.0UF 50V
C284	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V J
C285 , C286	CCCT1H270JC	CAP , CERAMIC	27PF 50V J
C287	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V Z
C288	HCEA1CH101T	CAP , ELECT	100UF 16V
C289	CCCT1H820JC	CAP , CERAMIC	82PF 50V J
C290	HCEA1AH471T	CAP , ELECT	470UF 10V
C912 , C913	HCEA1EH101T	CAP , ELECT	100UF 25V
C914 , C915	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V Z
C916 , C917	HCEA1HH100T	CAP , ELECT	10UF 50V
C918 , C919	HCEA1CH101T	CAP , ELECT	100UF 16V

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
C920	HCEA1AH471T	CAP , ELECT	470UF 10V
C921 , C923	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V Z
C957 , C958	HCQI1H102JZT	CAP , MYLAR	1000PF 50V J
C959	HCEA1HH1R0T	CAP , ELECT	1.0UF 50V
D791	HVD1SS133MT	DIODE	1SS133
D910 , D911	HVDMTZJ6.2BT	DIODE , ZENER	6.2V 1/2W
L271	KLQ220G405T	COIL , PEAKING(RADIAL)	22UH J 4X5
L272	KLQ5R6J405T	COIL , PEAKING(RADIAL)	5.6UH G 4X5
L273	KLQ101J405T	COIL , PEAKING(RADIAL)	100UH J 4X5
Q271	KVTKSC2785YT	T.R	KSC2785Y
Q272	KVTKSA1175YT	T.R	KSA1175Y
Q782 , Q783	HVTKRA107MT	T.R	KRA107M
Q784 , Q785	HVTKRC107MT	T.R	KRC107M
Q786	HVTKRA107MT	T.R	KRA107M
Q791	HVTKTA1266YT	T.R	KTA1266Y
Q793 ~ Q797	HVTKTC2874BT	T.R , MUTE	KTC2874B
Q901	HVTKSC2316YT	T.R	KSC2316Y
Q902	HVTKSA916YT	T.R	KSA916Y
R271 ~ R273	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R274	CRD20TJ682T	RES , CARBON	6.8K OHM 1/5W J
R275	CRD20TJ223T	RES , CARBON	22K OHM 1/5W J
R276	CRD20TJ750T	RES , CARBON	75 OHM 1/5W J
R277 , R278	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R279	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R280	CRD20TJ222T	RES , CARBON	2.2K OHM 1/5W J
R281	CRD20TJ393T	RES , CARBON	39K OHM 1/5W J
R282	CRD20TJ152T	RES , CARBON	1.5K OHM 1/5W J
R283	CRD20TJ682T	RES , CARBON	6.8K OHM 1/5W J
R284	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R285	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R286	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R780	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R784 ~ R788	CRD20TJ683T	RES , CARBON	68K OHM 1/5W J
R789	CRD20TJ562T	RES , CARBON	5.6K OHM 1/5W J
R790	CRD20TJ101T	RES , CARBON	100K OHM 1/5W J
R791	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R793 ~ R797	CRD20TJ562T	RES , CARBON	5.6K OHM 1/5W J
R798	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R799	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R905 ~ R907	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R910 , R911	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R914 , R915	CRD25TJ473T	RES , CARBON	47K OHM 1/4W J
IC91	HVINJM7815FA	IC , REGULATOR	NJM7815FA
IC92	HVINJM7915FA	IC , REGULATOR	NJM7915FA
IC93	HVINJM7806FA	IC , REGULATOR	NJM7806FA
BN43	CWZL75BN43	WIRE A'SSAY	
BN63	CWZL75BN63	WIRE A'SSAY	
BN82	BJP10GB132ZK	FLEXIBLE CONNECTOR (SOCKET)	TMC-D10X-A1
BN83	BJP14GB132ZK	FLEXIBLE CONNECTOR (SOCKET)	TMC-D14X-A1
BN97	CWB3F003150UZ	WIRE A'SSAY	
BN98	CWB1C008130BM	WIRE A'SSAY	
CN11	KJP06GA98ZM	WAFER	MOLEX35336-0610
CN21	KJP09GA98ZM	WAFER	MOLEX35336-0910
CN22	KJP11GA98ZM	WAFER	MOLEX35336-1110
CN31	KJP05GA98ZM	WAFER	MOLEX35336-0519

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
CN41	KJP09GA98ZM	WAFER	MOLEX35336-0910
CN46	KJP07GA98ZM	WAFER	MOLEX35336-0710
CN51 , CN52	BJP06GA130ZK	CONNECTOR (SOCKET)	TAC-L06X-A3
CN61 , CN62	BJP06GA130ZK	CONNECTOR (SOCKET)	TAC-L06X-A3
CN71 , CN72	BJP06GA130ZK	CONNECTOR (SOCKET)	TAC-L06X-A3
CN75	BJP13GA98ZM	CONNECTOR (SOCKET)	TAC-L13X-A3
CN76	KJP03GA98ZM	WAFER	MOLEX35336-0310
CN78	KJP04GA01ZM	WAFER	MOLEX5276-04A
C901 , C902	KCET63VAH123N	CAP , ELECT	12000UF/63V
C903 , C904	KCEA1VHS332E	CAP , ELECT	3300UF/35V
C905	HCEA1CH332E	CAP , ELECT	3300UF 16V
C922	HCEA1CH222E	CAP , ELECT	2200UF 16V
IC27	HVIANAM2024V	I.C , OSD	LC74763-9730
RY79	HSL4A004ZU	RELAY	OSA-SS-212DM3
R908 , R909	CRG2ANJ470H	RES , METAL	OXIDE FILM 47 OHM 2W J
R912	CRG1ANJ470H	RES , METAL	OXIDE FILM 47 OHM 1W J
S799	KST1A010Z	SW , TACT	
X271	HOX17744D220F	CRYSTAL	
	PCB2 CUP11395-2	**PCB , TRANS**	
C906 , C907	KCFE1J473JBT	CAP , FILM	0.047UF 63V J
C924	KCFE1J124JBT	CAP , FILM	0.12UF 63V J
F903 , F904	KJCFC5S	HOLDER , FUSE	
R913	KRD25TJ103T	RES , CARBON	10K OHM 1/4W J
D901	BVDGBJ1504	DIODE , BRIDGE	GBJ1504
	PCB3 CUP11395-3	**PCB , TRANS**	
C908 ~ C911	KCFEJ124JBT	CAP , FILM	0.12UF 63VJ
C951	HCEA1CH102E	CAP , ELECT	1000UF 16UF
C953	HCEA1CH101T	CAP , ELECT	100UF 16V
C954	HCEA1HH470T	CAP , ELECT	47UF 50V
C955	HCEA1HH4R7T	CAP , ELECT	4.7UF 50V
C952 , C956	HCEA1HH100T	CAP , ELECT	10UF 50V
D902 ~ D909	KVD1N4003ST	DIODE	1N4003
D913 , D951	KVD1N4003ST	DIODE	1N4003
D952	HVDMTZJ6.2BT	DIODE , ZENER	6.2V 1/2W
D953	KVD1N4003ST	DIODE	1N4003
D954	HVDMTZJ33BT	DIODE , ZENER	33V 1/2W
D956	HVDMTZJ6.2BT	DIODE , ZENER	6.2V 1/2W
Q951	HVTKSC2316YT	T.R	KSC2316Y
Q952	KVTKSA1175YT	T.R	KSA1175Y
R951	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R952 , R953	CRD25TJ560T	RES , CARBON	56 OHM 1/4W J
R954	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
CN94	KJP09GA01ZM	WAFER	MOLEX 5267-09A
CN96	KJP06GA01ZM	WAFER	MOLEX 5267-06A
CN97	KJP03GA90ZM	WAFER	MOLEX 35313-0310
CN98	KJP08GB03ZM	WAFER	
R901 ~ R904	KRQ1CJR47	RES , FUSE	
	FRONT B'D (CUP11551- 1,2,3,4,5,6,7)		
	PCB1 CUP11551-1	**PCB , U-COM**	
C801 , C802	HCEA1HKS4R7T	CAP , ELECT 4.7UF 50V	
C803 , C804	HCBS1H101KBT	CAP , CERAMIC 100PF 50V K	
C805 , C806	HCEA1HKS4R7T	CAP , ELECT 4.7UF 50V	

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
C807 , C808	HCEA1VKS100T	CAP , ELECT 10UF 35V	
C809 , C810	KCFE1J472JBT	CAP , FILM 4700PF 63V J	
C811 , C812	KCFE1J223JBT	CAP , FILM 0.022UF 63V J	
C813 , C814	KCFE1J123JBT	CAP , FILM	0.012UF 63V J
C815 , C816	KCFE1J683JBT	CAP , FILM	0.068UF 63V J
C817 , C818	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C827 , C828	HCEA1CKS470T	CAP , ELECT	47UF 16V
C829	HCEA1HKS2R2T	CAP , ELECT	2.2UF 50V
C830	CCKT1H101KB	CAP , CERAMIC	100PF 50V K
C831	CCKT1H102KB	CAP , CERAMIC	1000PF 50V K
C832 , C833	HCBS1H270JT	CAP , CERAMIC	27PF 50V J
C834	CCKT1H102KB	CAP , CERAMIC	1000PF 50V K
C835	HCBS1H181KBT	CAP , CERAMIC	180PF 50V K
C836	HCBS223ZFT	CAP , CERAMIC	0.022UF 50V Z
C837	HCBS1H473ZFT	CAP , CERAMIC	0.047UF 50V Z
C838 ~ C841	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C842 , C843	HCBS1H180JCT	CAP , CERAMIC	18PF 50V K
C846 , C847	HCEA1CKS470T	CAP , ELECT	47UF 16V
C848	HCEA1HKS2R2T	CAP , ELECT	2.2UF 50V
C849	CCCT1H220JC	CAP , CERAMIC	22PF 50V J
C850	HCBS1H821KBT	CAP , CERAMIC	820PF 50V K
C851	HCBS1H181KBT	CAP , CERAMIC	180PF 50V K
C852	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C854	HCEA0JH102T	CAP , ELECT	1000UF 6.3V
C855	HCEA1HKS1R0T	CAP , ELECT	1UF 50V
C856	HCBS1H821KBT	CAP , CERAMIC	820PF 50V K
C857 , C858	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C865	HCBS1H221KBT	CAP , CERAMIC	220PF 50V K
C866	HCBS1H561KBT	CAP , CERAMIC	560PF 50V K
C867	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C868 , C869	HCBS1H181KBT	CAP , CERAMIC	180PF 50V K
C870	HCEA1VKS100T	CAP , ELECT	10UF 35V
D801 ~ D806	BVDSEL2E10CFT	L.E.D , BLUE	
D807 ~ D810	HVD1SS133MT	DIODE	1SS133
D817 , D818	HVD1SS133MT	DIODE	1SS133
D819	BVDSEL2E10CFT	L.E.D , BLUE	
IC81	HVITMP87PS71AF	I.C , O.T.P	
IC82	BVIOPA2134UA	I.C , OP AMP	
IC83	BVISAA6579TV1	I.C , RDS FILTER	SAA6579T/V1
IC84	HVINJU3713G	I.C , EXPANDOR	
IC85	BVIMC74HC14D	I.C , INVERTOR SMD	
L801	KLQ02C100KT	COIL , AXAIL	10UH , K
Q801	HVTKSB811YT	T.R	KSB811Y
Q802	HVTKRC107MT	T.R	KRC107M
Q803	HVTKRA107MT	T.R	KRA107M
Q806	HVTKRA107MT	T.R	KRA107M
Q807	HVTKRC107MT	T.R	KRC107M
R801 , R802	CRD20TJ222T	RES , CARBON	2.2K OHM 1/5W J
R803 , R804	CRD20TJ563T	RES , CARBON	56K OHM 1/5W J
R805 , R806	CRD20TJ474T	RES , CARBON	470K OHM 1/5W J
R807 ~ R810	CRD20TJ563T	RES , CARBON	56K OHM 1/5W J
R811 , R812	CRD20TJ182T	RES , CARBON	1.8K OHM 1/5W J
R813 , R814	CRD20TJ821T	RES , CARBON	820 OHM 1/5W J
R815 , R816	CRD20TJ223T	RES , CARBON	22K OHM 1/5W J
R817 , R818	CRD20TJ392T	RES , CARBON	3.9K OHM 1/5W J

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
R819 , R820	CRD20TJ121T	RES , CARBON	120 OHM 1/5W J
R821	CRD25TJ102T	RES , CARBON	1K OHM 1/4W J
R822	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R835 , R836	CRD20TJ271T	RES , CARBON	270 OHM 1/5W J
R837	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R838	CRD20TJ332T	RES , CARBON	3.3K OHM 1/5W J
R839 ~ R844	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R845	CRD20TJ473T	RES , CARBON	47K OHM 1/5W J
R846	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R847 ~ R849	CRD20TJ272T	RES , CARBON	2.7K OHM 1/5W J
R850	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R851 , R852	CRD20TJ272T	RES , CARBON	2.7K OHM 1/5W J
R853 ~ R857	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R858 , R859	CRD20TJ273T	RES , CARBON	27K OHM 1/5W J
R860 , R861	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R862 , R863	CRD20TJ152T	RES , CARBON	1.5K OHM 1/5W J
R864 , R865	CRD20TJ182T	RES , CARBON	1.8K OHM 1/5W J
R867	CRD20TJ272T	RES , CARBON	2.7K OHM 1/5W J
R869	CRD20TJ332T	RES , CARBON	3.3K OHM 1/5W J
R870	CRD20TJ101T	RES , CARBON	100K OHM 1/5W J
R878	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R879 , R880	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R882	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R885	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R887	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R888 , R889	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R896 , R897	CRD20TJ122T	RES , CARBON	1.2K OHM 1/5W J
R898 , R899	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
S801 ~ S804	CST1A012ZT	SW , TACT	
S809 ~ S814	KST1A012ZT	SW , TACT	SKHV10910G
BN96	CWB1C006230BM	WIRE ASS'Y	
CN81	BJP26GA133ZK	FLEXIBLE CONNECTOR(PLUG)	TMC-D26P-A1
CN82	BJP10GA133ZK	FLEXIBLE CONNECTOR(PLUG)	TMC-D10P-A1
CN83	BJP14GA133ZK	FLEXIBLE CONNECTOR(PLUG)	TMC-D14P-A1
C853 , C886	BCESOHD104	CAP , GOLD	EECSOHD104V
FIP1	HFLSVA10MS11	F.I.P SVA-10MS11	
JW71	CWEH202100PP	WIRE	
RS01	KRVHIM602H32	SENSOR , REMOCON	
VR81	CVV2X07C104Z	RES , TONE	RK14128030214C
VR82	CVV2X07C104Z	RES , TONE	RK14128030214C
VR83	CVV2X05M104Z	RES , VARIABLE	RK14128030214Y
VR84	HSR2A015Z	ENCODER	EC16B12S00B2ZZZ
VR85	HSR2A018Z	ENCODER	EC16B24T03B2ZZZ
X801	HOX08000E160C	CRYSTAL	
X803	HOX04332E200C	CRYSTAL	
	PCB2 CUP11551-2	**PCB , AUDIO INPUT**	
C101 ~ C114	HCBS1H101KBT	CAP , CERAMIC	100PF 50V K
C115 ~ C118	HCEA1HKS4R7T	CAP , ELECT	4.7UF 50V
C119 ~ C121	HCBS1H181KBT	CAP , CERAMIC	180PF 50V K
C132	HCEA1CKS220T	CAP , ELECT	22UF 16V
C249 , C250	HCBS1H104ZFT	CAP,CERAMIC	0.1UF 50V Z
D101~108	HVD1SS133MT	DIODE	1SS133
IC11	HVITC9163AF	I.C , S/W	TC9163AF
R101 ~ R110	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
R111 ~ R124	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R125 ~ R128	CRD20TJ471T	RES , CARBON	470 OHM1/5W J
R129 ~ R131	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
BN84	KJP12GB99ZM	CONNECTOR	
JK11 , JK12	CJJ4P039W	JACK , IN/OUT	
JK13	CJJ4R027W	JACK , IN/OUT	
	PCB3 CUP11551-3	**PCB , AUDIO BUFFER**	
C122 , C123	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C124 , C125	HCEA1VH101T	CAP , ELECT	100UF 35V
C126 , C127	HCEA1HKS4R7T	CAP , ELECT	4.7UF 50V
C128 , C129	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C130 , C131	HCEA1HKS4R7T	CAP , ELECT	4.7UF 50V
IC12	BVIOPA2134UA	IC , OP AMP	
R132 ~ R135	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R136 ~ R141	CRD20TJ563T	RES , CARBON	56K OHM 1/5W J
BN11	KJP06GB99ZM	RES , CARBON	MOLEX 35237-0610
BN12	KJP07GB99ZM	CONNECTOR , HOUSING	MOLEX 35237-0710
CN84	KJP12GA98ZM	WAFER	
	PCB4 CUP11551-4	**PCB , VIDEO INPUT**	
C201	CCCT1H470JC	CAP , CERAMIC	47PF 50V J
C202 , C203	CCCT1H220JC	CAP , CERAMIC	22PF 50V J
C204	CCCT1H470JC	CAP , CERAMIC	47PF 50V J
C205	CCCT1H220JC	CAP , CERAMIC	22PF 50V J
C206 ~ C208	HCEA1CKS100T	CAP , ELECT	10UF 16V
C209 ~ C212	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C213 ~ C216	HCEA1AKS101T	CAP , ELECT	100UF 10V
IC23	HVINJM2296M	I.C , VIDEO SW	
R201 ~ R205	CRD20TJ750T	RES , CARBON	75 OHM 1/5W J
R206 , R207	CRD20TJ332T	RES , CARBON	3.3K OHM 1/5W J
R208 , R209	CRD20TJ4R7T	RES , CARBON	4.7 OHM 1/5W J
R210 ~ R213	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
BN21	KJP09GB99ZM	CONNECTOR	MOLEX 35237-0910
JK21	CJJ4S003W	JACK , VIDEO	
JK22	CJJ4N044Z	JACK , VIDEO	
	PCB5 CUP11551-5	**PCB , S-VIDEO INPUT**	
C221 , C222	CCCT1H470JC	CAP , CERAMIC	47PF 50V J
C223 ~ C226	CCCT1H220JC	CAP , CERAMIC	22PF 50V J
C227 , C228	CCCT1H470JC	CAP , CERAMIC	47PF 50V J
C229 , C230	CCCT1H220JC	CAP , CERAMIC	22PF 50V J
C231 ~ C236	HCEA1CKS100T	CAP , ELECT	10UF 16V
C237 ~ C242	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V J
C243 ~ C248	HCEA1AKS101T	CAP , ELECT	100UF 10V
IC21 , IC22	HVINJM2296M	I.C , VIDEO SW	
R221 ~ R230	CRD20TJ750T	RES , CARBON	75 OHM 1/5W J
R231 ~ R234	CRD20TJ332T	RES , CARBON	3.3K OHM 1/5W J
R235 ~ R238	CRD20TJ4R7T	RES , CARBON	4.7 OHM 1/5W J
R239 ~ R246	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
BN22	KJP11GB99ZM	CONNECTOR	
JK23	HJJ9S001Z	JACK , S-VIDEO	JY-5041-040
JK24	HJJ9N001Z	JACK , S-VIDEO	JY-5036-040
SW21	KSS2D004Z	SW , SLIDE	JSS4208A

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
	PCB7 CUP11551-6	**PCB , GUIDE**	
C859 , C861	HCBS1H220JT	CAP , CERAMIC	22PF 50V J
C860 , C862	HCBS1H270JT	CAP , CERAMIC	27PF 50V J
C863 , C864	HCBS1H220JT	CAP , CERAMIC	22PF 50V J
C881	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V J
C882	HCEA1AKS101T	CAP , ELECT	100UF 10V
C883	CCKT1H182KB	CAP , CERAMIC	1800PF 50V J
C884	HCEA1VH100T	CAP , ELECT	10UF 35V
C885	HCBS1H104ZFT	CAP , CERAMIC	01.UF 50V Z
C888	HCEA1CH100T	CAP , ELECT	10UF 16V
C889	HCBS1H473ZFT	CAP , CERAMIC	0.047UF 50V Z
D820	HVD1SS133MT	DIODE	1SS133MT
Q808	HVTKTC3198YT	T.R	KTC3138Y
Q809 , Q810	HVTKRC107MT	T.R	KRC107M
R826	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R828 , R829	CRD20TJ332T	RES , CARBON	3.3K OHM 1/5W J
R874 , R875	CRD20TJ272T	RES , CARBON	2.7K OHM 1/5W J
R877	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R891	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R892	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R893	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R894 , R895	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R900 ~ R902	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
BN81	BJP26GB132ZK	FLEXIBLE CONNECTOR(SOCKET)	TMC-D26X-A1
CN01	KJP15GB116ZG	WAFER , CARDCABLE	GF120-15S-LS
CN12	KJP07GA98ZM	WAFER	MOLEX 35336-0710
CN42	KJP14GA98ZM	WAFER	MOLEX 35336-1410
	PCB8 CUP11 551-7	**PCB , HEADPHONE**	
BN78	CWBIC004070BM	WIRE ASS'Y	
JK25	HJJ2E020Z	JACK , HEADPHONE	HTJ-064-05NG
JW72	CWZAVR2550JW82	WIRE ASS'Y	
	AMP B'D (CUP11397-1,2)		
	PCB1 CUP11397-1	**PCB , FRONT AMP**	
C501 , C502	HCEA1HH4R7T	CAP , ELECT	4.7UF 50V
C503 , C504	CCKT1H471KB	CAP , CERAMIC	470PF 50V K
C505 , C506	HCEA1CH470T	CAP , ELECT	47UF 16V
C507 , C508	CCCT1H150JC	CAP , CERAMIC	15PF 50V J
C509 , C510	CCKT1H181KB	CAP , CERAMIC	180PF 50V K
C511 , C512	HCQI1H223JZT	CAP , MYLAR	0.022UF 50V J
C517 , C518	HCQI1H223JZT	CAP , MYLAR	0.022UF 50V J
C519 , C520	HCEA1HH100T	CAP , ELECT	10UF 50V
C529 , C530	CCKT1H331KB	CAP , CERAMIC	330PF 50V K
C751	HCQI1H104JZT	CAP , MYLAR	0.1UF 50V J
C752 , C754	HCEA1HH100T	CAP , ELECT	10UF 50V
C755	HCEA1CH101T	CAP , ELECT	100UF 16V
C756	HCQI1H563JZT	CAP , MYLAR	0.056UF 50V J
C780	CCKT1H331KB	CAP , CERAMIC	330PF 50V K
D501 ~ D506	HVD1SS133MT	DIODE	1SS133
D751 ~ D754	HVD1SS133MT	DIODE	1SS133
D757 , D758	HVD1SS133MT	DIODE	1SS133
Q501 ~ Q506	HVTKTA1268GRT	T.R	KTA1268GR
Q507 , Q508	HVTKTC3200GRT	T.R	KTC3200GR
Q509 , Q510	HVTKTA1268GRT	T.R	KTA1268GR

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
Q511 , Q512	HVTKTC3200GRT	T.R	KTC3200GR
Q527 , Q528	KVTKSC2785YT	T.R	KSC2785Y
Q751 , Q752	HVTKTA1271YT	T.R	KTA1271Y
Q753	KVTKSC2785YT	T.R	KSC2785Y
Q755 , Q756	KVTKSC2785YT	T.R	KSC2785Y
Q757	HVTKTA1271YT	T.R	KTA1271Y
Q758	HVTKRA107MT	T.R	KRA107M
Q759	KVTKSC2785YT	T.R	KSC2785Y
R501 , R502	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R503 ~ R506	CRD20TJ473T	RES , CARBON	47K OHM 1/5W J
R507 , R508	CRD20TJ271T	RES , CARBON	270 OHM 1/5W J
R509 , R510	CRD20TJ560T	RES , CARBON	56 OHM 1/5W J
R511 ~ R514	CRD20TJ150T	RES , CARBON	15 OHM 1/5W J
R515 ~ R518	CRD20TJ152T	RES , CARBON	1.5K OHM 1/5W J
R519 , R520	CRD25TJ473T	RES , CARBON	47K OHM 1/4W J
R521 , R522	CRD20TJ242T	RES , CARBON	2.4K OHM 1/5W J
R523 ~ R528	CRD20TJ561T	RES , CARBON	560 OHM 1/5W J
R529 ~ R532	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R533 ~ R536	CRD20TJ561T	RES , CARBON	560 OHM 1/5W J
R537 , R538	CRD25TJ223T	RES , CARBON	22K OHM 1/4W J
R539 , R540	CRD20TJ223T	RES , CARBON	22K OHM 1/5W J
R541 , R542	CRD20TJ182T	RES , CARBON	1.8K OHM 1/5W J
R543 , R544	CRD20TJ561T	RES , CARBON	560 OHM 1/5W J
R545 , R546	CRD20TJ123T	RES , CARBON	12K OHM 1/5W J
R547 ~ R550	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R551 ~ R554	CRD25TJ820T	RES , CARBON	82 OHM 1/4W J
R555 , R556	CRD25TJ221T	RES , CARBON	220 OHM 1/4W J
R557 ~ R560	CRD25TJ2R2T	RES , CARBON	2.2 OHM 1/4W J
R563 ~ R566	CRD25TJ102T	RES , CARBON	1K OHM 1/4W J
R567 , R568	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R569 , R570	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R583 , R584	CRD20TJ331T	RES , CARBON	330 OHM 1/5W J
R751 , R752	CRD20TJ473T	RES , CARBON	47K OHM 1/5W J
R753 , R754	CRD2OTJ332T	RES , CARBON	3.3K OHM 1/5W J
R755	CRD20TJ100T	RES , CARBON	10 OHM 1/5W J
R756	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R758	CRD20TJ123T	RES , CARBON	12K OHM 1/5W J
R759	CRD20TJ105T	RES , CARBON	1M OHM 1/5W J
R761	CRD20TJ123T	RES , CARBON	12K OHM 1/5W J
R764	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R765	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R766	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R767	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R768	CRD20TJ473T	RES , CARBON	47K OHM 1/5W J
R769	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R774	CRD20TJ473T	RES , CARBON	47K OHM 1/5W J
R775	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R780	CRD20TJ331T	RES , CARBON	330 OHM 1/5W J
R790	CRD25TJ1R0T	RES , CARBO N	1 OHM 1/4W J
BN51 , BN52	BJP06GB131ZK	CONNECTOR (PLUG)	TAC-L06P-B3
BN72	BJP06GB131ZK	CONNECTOR (PLUG)	TAC-L06P-B3
BN73	KJP07GB99ZM	CONNECTOR , HOUSING	MOLEX35237-0710
CN77	KJP02GB03ZM	WAFER	
C513 ~ C516	HVTCEA1JAHS471E	CAP , ELECT	AHS 470/63V
Q515 , Q516	HVT2SA1360O	T.R	2SA1360O

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
Q517 , Q518	HVT2SC3423O	T.R	2SC3423O
Q519 , Q520	HVTKTD2061Y	T.R	KTD2061Y
Q521 , Q522	HVTKTB1369Y	T.R	KTB1369Y
R561 , R562	KRF5EKR22H	RES , CEMENT	0.22 OHM 5W K
R571 , R572	KRF5EKR22H	RES , CEMENT	0.22 OHM 5W K
	PCB2 CUP11397-2	**PCB , SURROUND AMP**	
C601 , C602	HCEA1HH4R7T	CAP , ELECT	4.7UF 50V
C603 , C604	CCKT1H471KB	CAP , CERAMIC	470PF 50V K
C605 , C606	HCEA1CH470T	CAP , ELECT	47UF 16V
C607 , C608	CCCT1H150JC	CAP , CERAMIC	15PF 50V J
C609 , C610	CCKT1H181KB	CAP , CERAMIC	180PF 50V K
C611 , C612	HCQI1H223JZT	CAP , MYLAR	0.022UF 50V J
C617 , C618	HCQI1H223JZT	CAP , MYLAR	0.022UF 50V J
C619 , C620	HCEA1HH100T	CAP , ELECT	10UF 50V
C629 , C630	CCKT1H331KB	CAP , CERAMIC	330PF 50V K
C701	HCEA1HH4R7T	CAP , ELECT	10UF 50V
C702	CCKT1H471KB	CAP , CERAMIC	470PF 50V K
C703	HCEA1CH470T	CAP , ELECT	47UF 16V
C704	CCCT1H150JC	CAP , CERAMIC	15PF 50V J
C705	CCKT1H181KB	CAP , CERAMIC	180PF 50V K
C706 , C709	HCQI1H223JZT	CAP , MYLAR	0.022UF 50V J
C710	HCEA1HH100T	CAP , ELECT	10UF 50V
D601 ~ D606	HVD1SS133MT	DIODE	1SS133
D701 ~ D703	HVD1SS133MT	DIODE	1SS133
Q601 ~ Q606	HVTKTA1268GRT	T.R	KTA1268GR
Q607 , Q608	HVTKTA3200GRT	T.R	KTC3200GR
Q609 , Q610	HVTKTA1268GRT	T.R	KTA1268GR
Q611 , Q612	HVTKTA3200GRT	T.R	KTC3200GR
Q627 , Q628	KVTKSC2785YT	T.R	KSC2785Y
Q701 ~ Q703	HVTKTA1268GRT	T.R	KTA1268GR
Q704	HVTKTC3200GRT	T.R	KTC3200GR
Q705	HVTKTA1268GRT	T.R	KTA1268GR
Q706	HVTKTC3200GRT	T.R	KTC3200GR
Q714	KVTKSC2785YT	T.R	KSC2785Y
R601 , R602	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R603 ~ R606	CRD20TJ473T	RES , CARBON	47K OHM 1/5W J
R607 , R608	CRD20TJ271T	RES , CARBON	270 OHM 1/5W J
R609 , R610	CRD20TJ560T	RES , CARBON	56 OHM 1/5W J
R611 ~ R614	CRD20TJ150T	RES , CARBON	15 OHM 1/5W J
R615 ~ R618	CRD20TJ152T	RES , CARBON	1.5K OHM 1/5W J
R619 , R620	CRD25TJ473T	RES , CARBON	47K OHM 1/4W J
R621 , R622	CRD20TJ242T	RES , CARBON	2.4K OHM 1/5W J
R623 ~ R628	CRD20TJ561T	RES , CARBON	560 OHM 1/5W J
R629 ~ R632	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R633 ~ R636	CRD20TJ561T	RES , CARBON	560 OHM 1/5W J
R637 ~ R640	CRD20TJ223T	RES , CARBON	22K OHM 1/5W J
R641 , R642	CRD20TJ182T	RES , CARBON	1.8K OHM 1/5W J
R643 , R644	CRD20TJ561T	RES , CARBON	560 OHM 1/5W J
R645 , R646	CRD20TJ123T	RES , CARBON	12K OHM 1/5W J
R647 ~ R650	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R651 ~ R654	CRD25TJ820T	RES , CARBON	82 OHM 1/4W J
R655 , R656	CRD25TJ221T	RES , CARBON	220 OHM 1/4W J
R657 ~ R660	CRD25TJ2R2T	RES , CARBON	2.2 OHM 1/4W J
R663 ~ R666	CRD25TJ102T	RES , CARBON	1K OHM 1/4W J

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
R667 , R668	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R669 , R670	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R683 , R684	CRD20TJ331T	RES , CARBON	330 OHM 1/5W J
R701	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R702 , R703	CRD20TJ473T	RES , CARBON	47K OHM 1/5W J
R704	CRD20TJ271T	RES , CARBON	270 OHM 1/5W J
R705	CRD20TJ560T	RES , CARBON	56 OHM 1/5W J
R706 , R707	CRD20TJ150T	RES , CARBON	15 OHM 1/5W J
R708 , R709	CRD20TJ152T	RES , CARBON	1.5K OHM 1/5W J
R710	CRD25TJ473T	RES , CARBON	47K OHM 1/4W J
R711	CRD20TJ242T	RES , CARBON	2.4K OHM 1/5W J
R712 ~ R714	CRD20TJ561T	RES , CARBON	560 OHM 1/5W J
R715 , R716	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R717 , R718	CRD20TJ561T	RES , CARBON	560 OHM 1/5W J
R719 , R820	CRD20TJ223T	RES , CARBON	22K OHM 1/5W J
R721	CRD20TJ182T	RES , CARBON	1.8K OHM 1/5W J
R722	CRD20TJ561T	RES , CARBON	560 OHM 1/5W J
R723	CRD20TJ123T	RES , CARBON	12K OHM 1/5W J
R724 , R725	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R726 , R727	CRD25TJ820T	RES , CARBON	82 OHM 1/4W J
R728	CRD25TJ221T	RES , CARBON	220 OHM 1/4W J
R729 , R730	CRD25TJ2R2T	RES , CARBON	2.2 OHM 1/4W J
R732 , R733	CRD25TJ102T	RES , CARBON	1K OHM 1/4W J
R734	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R735	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
BN61 , BN62	BJP06GB131ZK	CONNECTOR (PLUG)	TAC-L60P-B3
BN71	BJP06GB131ZK	CONNECTOR (PLUG)	TAC-L60P-B3
BN74	KJP10GB99ZM	WAFER	MOLEX 35237-1010
C613 ~ C616	KCEA1JAHS471E	CAP , ELECT	AHS 470/63V
C707 , C708	KCEA1JAHS471E	CAP , ELECT	AHS 470/63V
Q615 , Q616	HVT2SA1360O	T.R	2SA1360O
Q617 , Q618	HVT2SC3423O	T.R	2SC3423O
Q619 , Q620	HVTKTD2061Y	T.R	KTD2061Y
Q621 , Q622	HVTKTB1369Y	T.R	KTB1369Y
Q708	HVT2SA1360O	T.R	2SA1360O
Q709	HVT2SC3423O	T.R	2SC3423O
Q710	HVTKTD2061Y	T.R	KTD2061Y
Q711	HVTKTB1369Y	T.R	KTB1369Y
R661 , R662	KRF5EKR22H	RES , CEMENT	0.22 OHM 5W K
R671 , R672	KRF5EKR22H	RES , CEMENT	0.22 OHM 5W K
R731 , R736	KRF5EKR22H	RES , CEMENT	0.22 OHM 5W K
	HEAT SINKASS'Y (CMYL75)		
	ASS'Y 1 CDD1A013WA FAN ASS'Y		
	BDMMDN4RB4MRC	MOTOR	
	CDD1A013	FAN	
JW01	CWBIC002100BI	WIRE ASS'Y	
	ASS'Y 2 CMY1A165ZA	**HEAT SINK ASS'Y(F)**	
	CMY1A165	**SINK , HEAT(F)**	
Q613 , Q614	HVTKTC3114A	T.R , (BIAS)	2SC4137V
Q623 , Q624	HVT2SC4468	T.R , POWER	2SC4468
Q625 , Q626	HVT2SA1695	T.R , POWER	2SA1695
Q707	HVTKTC3114A	T.R , (BIAS)	KTC3114A
Q712	HVT2SC4468	T.R , POWER	2SC4468

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
Q713	HVT2SA1695	T.R , POWER	2SA1695
	ASS'Y 3 CMY1A166ZA	**HEAT SINK ASS'Y(R)**	
	CMY1A166 SINK , HEAT(R)		
Q513 , Q514	HVTKTC3114A	T.R , (BIAS)	KTC3114A
Q523 , Q524	HVT2SC4468	T.R , POWER	2SC4468
Q525 , Q526	HVT2SA1695	T.R , POWER	2SA1695
TH71	KRTP43T7D330B	THERMAL SENSOR , POSISTOR	P43T7D330BW1.5
	POWER B'D (CUP11431-1,2,3,4)		
	PCB1 CUP11431-1	**PCB , SPEAKER B'D**	
C521 , C522	HCQI1H473JZT	CAP , MYLAR	0.047UF 50V J
C523 , C524	HCQI1H562JZT	CAP , MYLAR	5600PF 50V J
C525 , C526	HCQI1H473ZFT	CAP , MYLAR	0.047UF 50V J
C621 , C622	HCQI1H473JZT	CAP , MYLAR	0.047UF 50V J
C623 , C624	HCQI1H562JZT	CAP , MYLAR	5600PF 50V J
C625 , C626	HCQI1H473JZT	CAP , MYLAR	0.047UF 50V J
C757	HCQI1H473JZT	CAP , MYLAR	0.047UF 50V J
C759	HCQI1H562JZT	CAP , MYLAR	5600PF 50V J
C761	HCQI1H473JZT	CAP , MYLAR	0.047UF 50V J
D507	HVD1SS133MT	DIODE	1SS133
D607	HVD1SS133MT	DIODE	1SS133
D759	HVD1SS133MT	DIODE	1SS133
Q529	HVTKRC107MT	T.R	KRC107M
Q629	HVTKRC107MT	T.R	KRC107M
Q760	HVTKRC107MT	T.R	KRC107M
R573 , R574	CRD25TJ470T	RES , CARBON	47 OHM 1/4W J
R579	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R580 , R581	CRD25TJ470T	RES , CARBON	47 OHM 1/4W J
R673 , R674	CRD25TJ470T	RES , CARBON	47 OHM 1/4W J
R677	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R678 , R679	CRD25TJ470T	RES , CARBON	47 OHM 1/4W J
R770 , R771	KRD25TJ470T	RES , CARBON	47 OHM 1/4W J
R773	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
BN75	BJP13GB131ZK	CONNECTOR(PLUG)	TAC-L13P-B3
BN76	KJP03GB99ZM	CONNECTOR	MOLEX 35237-0310
JK51	CJJ5Q007Z	TERMINAL , SP(RRRR/BBBB)	
JK61	CJJ5N005Z	TERMINAL , SP(R/B)	
L501 , L502	CLEYK0R5KAK	COIL , SPEAKER	0.5UH K
L601 , L602	CLEYK0R5KAK	COIL , SPEAKER	0.5UH K
L701	CLEYK0R5KAK	COIL , SPEAKER	0.5UH K
RY51 , RY61	HSL4A010ZU	RELAY	OSA-SS-212DM5
RY71	HSL1A008ZE	RELAY	SDT-S-112DMR
R575 , R576	CRG1ANJ100H	RES , METAL OXIDE FILM	10 OHM 1W J
R577 , R578	CRG1ANJ331H	RES , METAL OXIDE FILM	330 OHM 1W J
R675 , R676	CRG1ANJ100H	RES , METAL OXIDE FILM	10 OHM 1W J
R772	CRG1ANJ100H	RES , METAL OXIDE FILM	10 OHM 1W J
	PCB2 CUP11431-2	**PCB , AC OUTLET**	
D991	HVD1SS133MT	DIODE	1SS133
F901	KJCFC5S	HOLDER , FUSE	
Q991	HVTKRC107MT	T.R	KRC107M
CN91	KJP02KA060ZY	WAFER	7.92MM (YUNHO)
CN92 , CN93	KJP02GA89ZM	WAFER	MOLEX 35328-02
CN95	KJP03GA01ZM	WAFER	MOLEX 5267-03A

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
C991	BCKWKH472ME	CAP , CERAMIC	DE1310-610E472M
C992	BCQE2E104KDE	CAP , LINE ACROSS	0.1UF 250V KD
RY91	HSL1A008ZE	RELAY	SDT-S-112DMR
	PCB3 CUP11431-2	**PCB , SUB TRANS**	
BN93	CWB4DA32150UZ	WIRE ASS'Y	
BN94	CWB1D009230BM	WIRE ASS'Y	
BN95	CWB1C003150BM	WIRE ASS'Y	
T902	CLT5L052ZE	TRANS , POWER	
	PCB4 CUP11431-4	**PCB , CONNECTOR**	
R791	CRD25TJ1R0T	RES , CARBON	1 OHM 1/4W J
CN43	KJP06GB03ZM	WAFER	
CN63	KJP04GB03ZM	WAFER	
CN73	KJP07GA98ZM	WAFER	MOLEX 35336-0710
CN74	KJP10GA98ZM	WAFER	MOLEX 35336-1010
	SURR B'D (CUP11550-1,2)		
	PCB1 CUP11550-1	**PCB , SURROUND-1**	
C365	CCKT1H104ZF	CAP , CERAMIC	0.1UF 50V Z
C367	HCEA1CH101T	CAP , ELECT	100UF 16V
C369	HCBS1H103ZFT	CAP ,CERAMIC	0.01UF 50V Z
C370	CCKT1H101KB	CAP , CERAMIC	100PF 50V K
C371	HCBS1H101KBT	CAP , CERAMIC	100PF 50V K
C372 , C373	HCBS1H270JT	CAP , CERAMIC	27PF 50V J
C374	HCEA1CH101T	CAP , ELECT	100UF 16V
C375	HCBS1H473ZFT	CAP , CERAMIC	0.047UF 50V Z
C376	HCEA1CH101T	CAP , ELECT	100UF 16V
C377 , C378	HCBS1H104ZFT	CAP , CERAMIC	0.1UF 50V Z
C379	HCEA1CH101T	CAP , ELECT	100UF 16V
C380	HCEA1CKS100T	CAP , ELECT	10UF 16V
C381	CCFT1H104ZF	CAP , SEMI	0.1UF 50V Z
C382	HCBS1H473ZFT	CAP , CERAMIC	0.047UF 50V Z
C383	HCEA1AH471T	CAP , ELECT	470UF 10V
C387	CCC1H180JC	CAP , CERAMIC	18PF 50V J
C388	CCKT1H101KB	CAP , CERAMIC	100PF 50V K
C389 , C390	HCEA1CH101T	CAP , ELECT	100UF 16V
C391	HCBS1H104ZFT	CAP , CERAMIC	0.1UF 50V Z
C392	HCBS1H180JCT	CAP , CERAMIC	18PF 50V J
C393	HCEA1CH101T	CAP , ELECT	100UF 16V
C394	HCBS1H473ZFT	CAP , CERAMIC	0.047UF 50V Z
C395	HCBS1H181KBT	CAP , CERAMIC	18PF 50V J
C396	HCEA1CH101T	CAP , ELECT	100UF 16V
C397	CCKT1H101KB	CAP , CERAMIC	100PF 50V K
C398 ~ C400	HCBS1H104ZFT	CAP , CERAMIC	0.1UF 50V Z
C401	HCBS1H180JCT	CAP , CERAMIC	18PF 50V J
C403 , C404	HCBS1H104ZFT	CAP , CERAMIC	0.1UF 50V Z
C405	CCFT1H104ZF	CAP , SEMI	0.1UF 50V Z
C406	HCEA1CH101T	CAP , ELECT	100UF 16V
C407	HCBS1H104ZFT	CAP , CERAMIC	0.1UF 50V Z
C409	HCEA1CH101T	CAP , ELECT	100UF 16V
C410	HCEA1AH471T	CAP , ELECT	470UF 10V
C411	HCBS1H104ZFT	CAP , ELECT	0.1UF 50V Z
C412	CCFT1H104ZF	CAP , SEMI	0.1UF 50V Z
C413	HCEA1AH471T	CAP , ELECT	

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
C414	HCBS1H473ZFT	CAP , CERAMIC	0.047UF 50V Z
C415	HCBS1H104ZFT	CAP , CERAMIC	0.1UF 50V Z
C416	HCEA1AH471T	CAP , ELECT	470UF 10V
C417	HCEA1CH101T	CAP , ELECT	100UF 16V
C418	HCEA1AH471T	CAP , ELECT	470UF 10V
C419	HCBS1H473ZFT	CAP , CERAMIC	0.047UF 50V Z
C420 , C421	CCCT1H330JC	CAP , CERAMIC	33PF 50V JC
C429	HCEA1CH101T	CAP , ELECT	100UF 16V
C430	CCKT1H101KB	CAP , CERAMIC	100PF 50V K
C431	HCBS1H102KBT	CAP , CERAMIC	1000PF 50V K
C432 , C433	HCBS1H120JCT	CAP , CERAMIC	12PF 50V JC
C434	CCKT1H471KB	CAP , CERAMIC	470PF 50V K
C435 , C437	HCBS1H104ZFT	CAP , CERAMIC	0.1UF 50V Z
C436	HCEA1HH2R2T	CAP , ELECT	2.2UF 50V
C438	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C439	HCBS1H104ZFT	CAP , CERAMIC	0.1UF 50V Z
C440	HCEA1VH100T	CAP , ELECT	10UF 35V
C449 ~ C451	HCBS1H104ZFT	CAP , CERAMIC	0.1UF 50V Z
C452	HCEA1CH101T	CAP , ELECT	100UF 16V
C454 ~ C457	HCBS1H101KBT	CAP , CERAMIC	100PF 50V K
C458 , C459	CCFT1H104ZF	CAP , SEMI	0.1UF 50V Z
D301	HVDMTZJ4.7BT	DIODE , ZENER	4.7V 1/2W
D302	HVDMTZJ3.3BT	DIODE , ZENER	3.3V 1/2W
1C31	HVITC74HCU04AFN	I.C , INVERTER	TC74HCU04AFN
IC33	HVI74LCX08MX	I.C , DIR	74LCX08MX
IC34	HVIAK4586VQ	I.C , DIR + CODEC	AK4586-VQ
IC35	HVICS493264-CL	I.C , DSP	
L301 ~ L303	KLQ100J405T	COIL , PEAKING (RADIAL)	10UH J 4*5
Q301 , Q303	HVTKSC2316YT	T.R	KSC2316Y
R377	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R378	CRD20TJ4R7T	RES , CARBON	4.7 OHM 1/5W J
R380 ~ R382	CRD20TJ4R7T	RES , CARBON	4.7 OHM 1/5W J
R383 , R384	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R385 , R386	CRD20TJ750T	RES , CARBON	75 OHM 1/5W J
R387	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R388	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R389	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R392 ~ R394	CRD20TJ4R7T	RES , CARBON	4.7 OHM 1/5W J
R395	CRD20TJ221T	RES , CARBON	220 OHM 1/5W J
R396	CRD20TJ105T	RES , CARBON	1M OHM 1/5W J
R397	KRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R398	CRD20TJ4R7T	RES , CARBON	4.7 OHM 1/5W J
R400	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R401	CRD20TJ681T	RES , CARBON	680 OHM 1/5W J
R402	CRD20TJ8R2T	RES , CARBON	8.2 OHM 1/5W J
R403 ~ R405	CRD20TJ332T	RES , CARBON	3.3K OHM 1/5W J
R406 , R407	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R408 ~ R415	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R416	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R417	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R418	CRD20TJ332T	RES , CARBON	3.3K OHM 1/5W J
R419	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R420	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R421	CRD20TJ330T	RES , CARBON	33 OHM 1/5W J
R422	CRD20TJ333T	RES , CARBON	33K OHM 1/5W J

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
R423 ~ R428	CRD20TJ330T	RES , CARBON	33 OHM 1/5W J
R429	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R430	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R431	CRD20TJ330T	RES , CARBON	33 OHM 1/5W J
R433	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R434	CRD20TJ183T	RES , CARBON	18K OHM 1/5W J
R438 , R439	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R448	CRD20TJ330T	RES , CARBON	33 OHM 1/5W J
R450	CRD20TJ8R2T	RES , CARBON	8.2 OHM 1/5W J
R451 ~ R453	CRD20TJ1R0T	RES , CARBON	1 OHM 1/5W J
R454 , R455	CRD20TJ750T	RES , CARBON	75 OHM 1/5W J
BN31	KJP05GB99ZM	CONNECTOR	MOLEX 35237-0510
BN47	KJP12GB99ZM	CONNECTOR	MOLEX 35237-1210
BN48	KJP10GB99ZM	CONNECTOR	MOLEX 35237-1010
JK31	HJSTORX179	MODULE , OPTICAL (RX)	TORX179
JK32	HJSTORX179	MODULE , OPTICAL (RX)	TORX179
JK33	CJJ4M043Z	JACK , BOARD	
JK34	HJS9L001Z	MODULE , OPTICAL (TX)	
JK35	CJJ4N050X	JACK , BOARD	
L306	KLZ9H001Z	BEAD , CORE	
L307	KLZ9H001Z	BEAD , CORE	
X301	HOX12288E320C	CRYSTAL	
	PCB2 CUP11550-2	**PCB , SURROUND-2**	
C151 ~ C154	HCEA1HKS4R7T	CAP , ELECT	4.7UF 50V
C155 , C156	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C157 ~ C159	HCEA1HKS4R7T	CAP , ELECT	4.7UF 50V
C160	HCEA1CKS100T	CAP , ELECT	10UF 16V
C161 , C162	HCBS1H270JT	CAP , CERAMIC	27PF 50V J
C163 , C164	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C165 ~ C168	HCEA1CKS100T	CAP , ELECT	10UF 16V
C169 , C170	HCBS1H270JT	CAP , CERAMIC	27PF 50V J
C171 , C172	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C173 ~ C175	HCEA1HKS4R7T	CAP , ELECT	4.7UF 50V
C176 ~ C178	HCEA1CKS100T	CAP , ELECT	10UF 16V
C179 , C180	HCBS1H223ZFT	CAP , CERAMIC	0.022UF 50V Z
C181 , C182	HCEA1EH101T	CAP , ELECT	100UF 25V
C183 ~ C185	HCBS1H181KBT	CAP , CERAMIC	180PF 50VK
C301 , C302	HCEA1VKS100T	CAP , ELECT	10UF 35V
C303 , C304	CCKT1H103ZF	CAP , CERAMIC	0.01UF 50V Z
C305 , C306	CCKT1H223ZF	CAP , CERAMIC	470UF 25V
C307 , C308	HCEA1EH470T	CAP , CERAMIC	0.022UF 50V Z
C309 , C310	HCQI1H102JZT	CAP , MYLAR	1000PF 50V J
C311 , C312	CCKT1H121KB	CAP , CERAMIC	120PF 50V K
C313 , C314	HCEA1CKS100T	CAP , ELECT	10UF 16V
C315 , C316	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V Z
C317 , C318	CCKT1H471KB	CAP , CERAMIC	470PF 50V K
C319 , C320	CCKT1H101KB	CAP , CERAMIC	100PF 50V K
C321 , C322	HCEA1CKS100T	CAP , ELECT	10UF 16V
C323 , C324	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V Z
C325 , C326	HCEA1EH470T	CAP , ELECT	47UF 25V
C327	HCQI1H222JZT	CAP , MYLAR	2200PF 50V J
C328	HCQI1H272JZT	CAP , MYLAR	2700PF 50V J
C329	CCKT1H101KB	CAP , CERAMIC	100PF 50V K
C330	HCQI1H562JZT	CAP , MYLAR	5600PF 50V J

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
C331	HCQI1H102JZT	CAP , MYLAR	1000PF 50V J
C332	CCCT1H680JC	CAP , CERAMIC	68PF 50V J
C333	HCEA1HKS4R7T	CAP , ELECT	4.7UF 50V
C334	HCEA1CKS100T	CAP , ELECT	10UF 16V
C335 , C336	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V Z
C337 , C338	HCEA1EH470T	CAP , ELECT	47UF 25V
C339 , C340	HCQI1H222JZT	CAP , MYLAR	2200PF 50V J
C341 , C342	HCQI1H102JZT	CAP , MYLAR	1000PF 50V J
C343 , C344	CCKT1H151KB	CAP , CERAMIC	150PF 50V K
C345 , C346	CCCT1H680JC	CAP , CERAMIC	68PF 50V J
C347 , C348	HCEA1CKS100T	CAP , ELECT	10UF 16V
C349 , C350	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V J
C351 ~ C353	HCBS1H181KBT	CAP , CERAMIC	180PF 50V K
C355 , C356	HCEA1HH4R7T	CAP , ELECT	4.7UF 50V
C357 , C358	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V Z
C359	CCKT1H471KB	CAP , CERAMIC	470PF 50V K
C360	HCEA1CKS100T	CAP , ELECT	10UF 16V
C361 , C362	CCKT1H223ZF	CAP , CERAMIC	0.022UF 50V Z
C363 , C364	HCEA1CKS100T	CAP , ELECT	10UF 16V
IC13	BVIOPA2134UA	I.C , OP AMP	OPA2134UA
IC14 , IC15	HVINJM2068MDTE1	I.C , OP AMP	NJM2068MD-TE1
IC16	HVITC9482F	I.C , ELECT VOL	TC9482F
IC36	HVITC9164AF	I.C , S/W	TC9164F
IC37 ~ IC42	HVINJM2068MDTE1	I.C , OP AMP	NJM2068MD-TE1
Q302	HVTKTC2874BT	T.R , MUTE	KTC2874B
R151 ~ R154	CRD20TJ563T	RES , CARBON	56K OHM 1/5W J
R155 , R156	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R157 , R158	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R159 , R160	CRD20TJ563T	RES , CARBON	56K OHM 1/5W J
R161 , R162	CRD20TJ392T	RES , CARBON	3.9K OHM 1/5W J
R163	CRD20TJ203T	RES , CARBON	20K OHM 1/5W J
R164	CRD20TJ303T	RES , CARBON	30K OHM 1/5W J
R165	CRD20TJ563T	RES , CARBON	56K OHM 1/5W J
R166	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R167 , R168	CRD20TJ222T	RES , CARBON	2.2K OHM 1/5W
R169 , R170	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R171 , R172	CRD20TJ563T	RES , CARBON	56K OHM 1/5W J
R173 , R174	CRD20TJ392T	RES , CARBON	3.9K OHM 1/5W J
R175 , R176	CRD20TJ203T	RES , CARBON	20K OHM 1/5W J
R177 , R178	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R179 , R180	CRD20TJ222T	RES , CARBON	2.2K OHM 1/5W J
R181 , R182	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R183 ~ R185	CRD20TJ563T	RES , CARBON	56K OHM 1/5W J
R186 ~ R188	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R189 , R190	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R191 ~ R193	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R194	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R301 , R302	CRD20TJ562T	RES , CARBON	5.6K OHM 1/5W J
R305 , R306	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R307 , R308	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R309 , R310	CRD20TJ822T	RES , CARBON	8.2K OHM 1/5W J
R311 , R312	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R313 , R314	CRD20TJ223T	RES , CARBON	22K OHM 1/5W J
R315 , R316	CRD20TJ182T	RES , CARBON	1.8K OHM 1/5W J
R317 , R318	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J

LOAD NO.	PART NO.	DESCRIPTION	SPECIFICATION
R319 , R320	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R321 ~ R326	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R327 , R328	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R329 ~ R332	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R334 , R334	CRD20TJ152T	RES , CARBON	1.5K OHM 1/5W J
R335	CRD20TJ122T	RES , CARBON	1.2K OHM 1/5W J
R336	CRD20TJ472T	RES , CARBON	4.7K OHM 1/5W J
R337	CRD20TJ183T	RES , CARBON	18K OHM 1/5W J
R338	CRD20TJ103T	RES , CARBON	10K OHM 1/5W J
R339	CRD20TJ113T	RES , CARBON	11K OHM 1/5W J
R340	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R341 , R342	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R343	CRD20TJ563T	RES , CARBON	56K OHM 1/5W J
R344 ~ R346	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R347 , R348	CRD20TJ152T	RES , CARBON	1.5K OHM 1/5W J
R349 , R350	CRD20TJ122 T	RES , CARBON	1.2K OHM 1/5W J
R351 , R352	CRD20TJ183T	RES , CARBON	18K OHM 1/5W J
R353 , R354	CRD20TJ113T	RES , CARBON	11K OHM 1/5W J
R355 , R356	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R357 , R358	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R359 ~ R361	CRD20TJ102T	RES , CARBON	1K OHM 1/5W J
R362 , R363	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R364 , R365	CRD20TJ332T	RES , CARBON	3.3K OHM 1/5W J
R366	CRD20TJ104T	RES , CARBON	100K OHM 1/5W J
R367 , R368	CRD20TJ101T	RES , CARBON	100 OHM 1/5W J
R369 , R370	CRD20TJ151T	RES , CARBON	150 OHM 1/5W J
R371 , R372	CRD20TJ562T	RES , CARBON	5.6K OHM 1/5W J
BN41	KJP09GB99ZM	CONNECTOR	MOLEX35237-0910
BN42	KJP14GB99ZM	CONNECTOR	MOLEX35237-1410
BN46	KJP07GB99ZM	CONNECTOR , HOUSING	MOLEX35237-0710
CN47	KJP12GA98ZM	WAFER	MOLEX35336-1210
CN48	KJP10GA98ZM	WAFER	MOLEX35336-1010
	MISCELLANEOUS		
BN01	CWC1C4A15B060B	CARD CABLE	
F901	KBA2C4000TLEZ	FUSE	
F903 , F904	KBA2C8000TLUZ	FUSE	
T901	CLT5V033ZE	TRANS , POWER	
	CJA2B043Z	CORD , POWER	EUR 2.5A 250V
	HNVTFCE 1E319A	TUNER MODULE	
	CARTL76	REMOCON , TANSMITTER ASS'Y	
	KLRICM04	ADAPTOR , 75-300(PAL)	
	CQX1A647X	MANUAL , INSTRUCTION	
	CSA267	ANT , FM T	
	CSA3A013Z	ANT , AM LOOP	
	CRE1A037	LOCKER	

SERVICE MANUAL

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